

**● BLAUPUNKT**

**NAVIGATION**

**TravelPilot RNS 150**

7 612 001 172

**TravelPilot RNS 150**

7 612 001 173

**TravelPilot RNS 3**

7 612 001 430/475/490

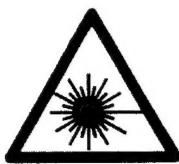
**TravelPilot RNS 150 US**

7 612 001 389

8 622 402 584 WG-KN 07/00

**Schaltbild • Circuit diagram**

**CLASS 1  
LASER PRODUCT**



**UNSICHTBARE LASERSTRAHLUNG  
NICHT DEM STRAHL AUSSETZEN  
LASERKLASSE 3B**

**(D) VORSICHT!**

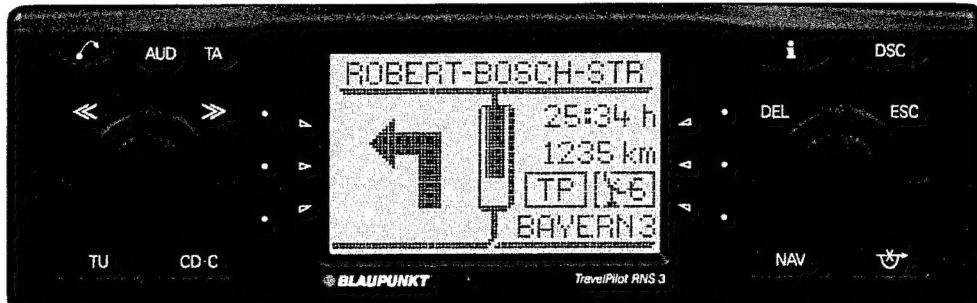
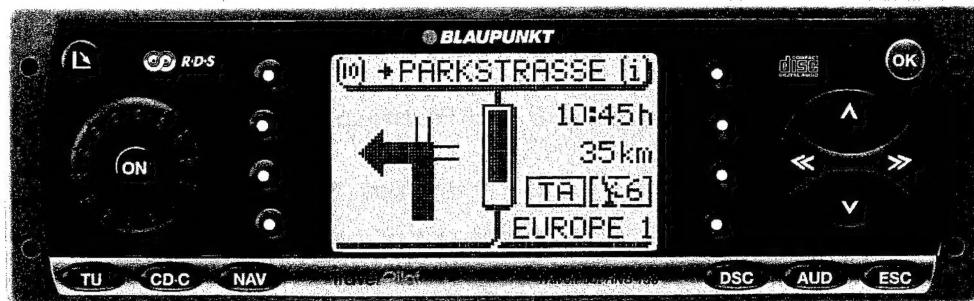
**Das Gerät beinhaltet eine Laserkomponente!  
Im Servicefall nachfolgende Hinweise  
beachten:**

- Das Gerät arbeitet mit unsichtbarem Laserstrahl.  
Bei geöffnetem Gerät tritt im Bereich des Plattenfaches  
Laserstrahlung aus.
- Nicht in den Strahl blicken.
- Unbeteiligte Personen vom Arbeitsplatz fernhalten.
- Der Betrachtungsabstand darf 13cm nicht unterschreiten.  
Kann dies nicht eingehalten werden, muß eine geeignete  
Laserschutzbrille getragen werden.

**(GB) CAUTION!**

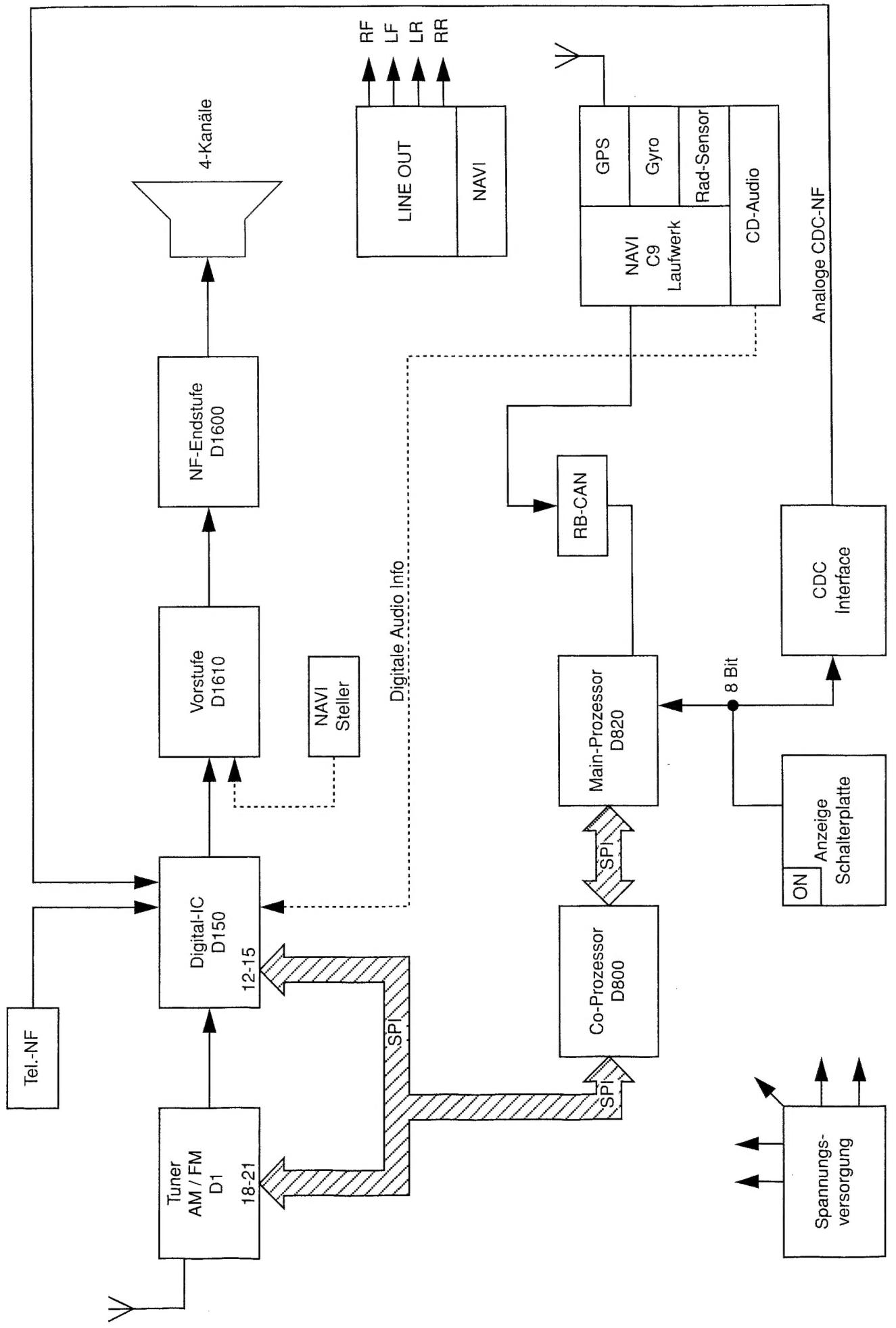
**This unit contains a laser component!  
For service observe the following important  
instructions:**

- The unit operates with an invisible laser beam.  
When the cover is removed, near the disc compartment, invisible  
laser beams are apparent.
- Avoid direct eye contact with these beams.
- Keep other people away from the working place.
- The viewing distance should not be less than 13cm.  
If this distance cannot be ensured, use suitable laser safety  
goggles.



## Inhaltsverzeichnis / Table of contents

Blockschaltbild .....	3
Grenzwerte .....	4
Layout Anschlußplatte 3759 D01 .....	45
Layout GPS-Platte 0775 A08 .....	28
Layout Gyro-Platte 0585 A02 .....	43
Layout Hauptplatte 3756 D02 .....	20 - 24
Layout HF-Platte 0276 A04 .....	25
Layout Netzteil 0277 A13 .....	46
Layout Prozessorplatte 0849 A01 .....	41 - 42
Layout Schalterplatte 0910 A05 .....	51 - 52
Layout Schalterplatte 3668 D02 .....	47 - 48
 Schaltbild Anschlußplatte 3759 D01 .....	44
Schaltbild GPS-Platte 0775 A08 .....	29 - 30
Schaltbild Gyro-Platte 0585 A02 .....	43
Schaltbild Hauptplatte 3756 D02	
CO-Prozessor / TIM .....	7 - 8
Digital-IC .....	17
Interface .....	19
MCM-Modul .....	14 - 16
NF .....	9 - 10
Spannungsversorgung .....	18
Verbindungen .....	11 - 13
Schaltbild HF-Platte 0276 A04 .....	26 - 27
Schaltbild Netzteil 0277 A13 .....	46
Schaltbild Prozessorplatte 0849 A01	
CPU .....	31 - 33
Interface .....	38
NAVI-Sprache .....	37
Speicher-Modul .....	34 - 36
Steuerung CD-ROM-Laufwerk .....	39 - 40
Schaltbild Schalterplatte 0910 A05 .....	53 - 54
Schaltbild Schalterplatte 3668 D02 .....	49 - 50
 Spannungsversorgung (Diagramm) .....	5
SPI-Bus (Diagramm) .....	6
 Block diagram .....	3
Circuit diagram Connector board 3759 D01 .....	44
Circuit diagram GPS board 0775 A08 .....	29 - 30
Circuit diagram Gyro board 0585 A02 .....	43
Circuit diagram Key board 0910 A05 .....	53 - 54
Circuit diagram Key board 3668 D02 .....	49 - 50
Circuit diagram Main board 3756 D02	
Connections .....	11 - 13
MCM modul .....	14 - 16
CO processor / TIM .....	7 - 8
Digital IC .....	17
AF .....	9 - 10
Interface .....	19
Power supply .....	18
Circuit diagram Power board 0277 A13 .....	46
Circuit diagram Processor board 0849 A01	
CPU .....	31 - 33
Memory modul .....	34 - 36
NAVI voice .....	37
Interface .....	38
CD-ROM mechanism control .....	39 - 40
Circuit diagram RF board 0276 A04 .....	26 - 27
 Layout Connector board 3759 D01 .....	45
Layout GPS board 0775 A08 .....	28
Layout Gyro board 0585 A02 .....	43
Layout Key board 0910 A05 .....	51 - 52
Layout Key board 3668 D02 .....	47 - 48
Layout Main board 3756 D02 .....	20 - 24
Layout Power board 0277 A13 .....	46
Layout Processor board 0849 A01 .....	41 - 42
Layout RF board 0276 A04 .....	25
 Limiting value .....	4
Power supply (diagram) .....	5
SPI-Bus (diagram) .....	6



# Grenzwerte

## Versorgungsspannungen

Folgende Tabelle gibt Auskunft, welche Spannungen, in welchen Toleranzbreiten und zu welchen Betriebsbedingungen gemessen werden müssen.

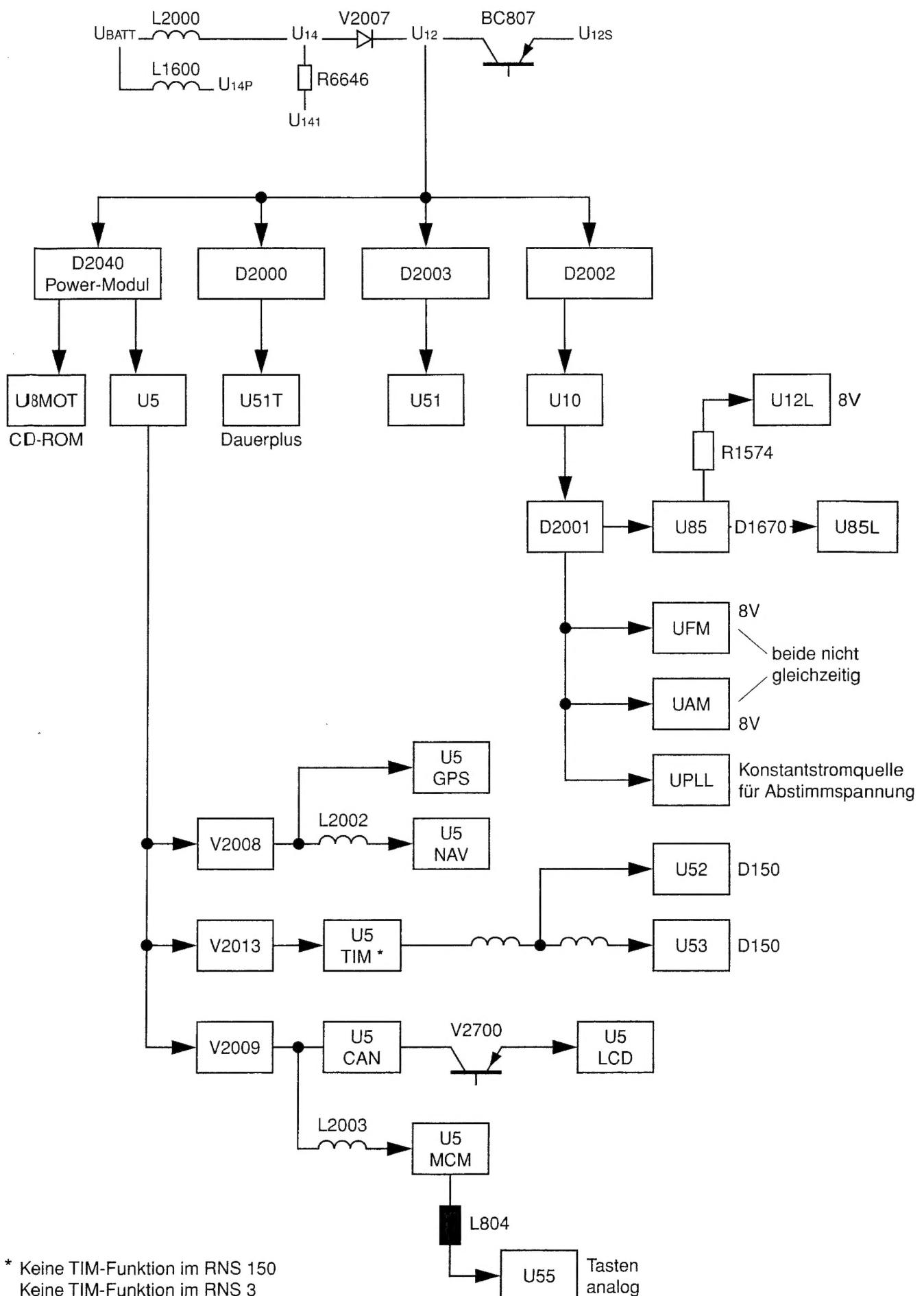
Spannung	Meßpunkt	Nennwert	Toleranz	Umin	Umax	Zu messen wenn
U10	MP111-12	10 V	4%	9.6	10.4	Gerät ein
UPLL	MP_UPLL	9.7 V		9.3		Gerät ein
U85	MP_U85	8.5 V		8.40	8.7	Gerät ein
UAM	MP_U_A	8.5 V		8.40	8.7	Gerät ein, AM-
UFM	MP_U_F	8.5 V		8.40	8.7	Gerät ein, FM-
U85L	MPU85L			U85/2		
U12L	MPU12L			U12S/		
U12S	MPU12S			U12-		
U5	MPU5	5 V	-1%, +2%	4.90	5.1	Gerät ein
U5_MCM	MPU54	5 V		4.90		Gerät ein
U55	MPU55	5 V		4.85		Gerät ein
U5_NAV	MPU5NA	5 V		4.90		Gerät ein
U52	MP_U52	5 V		4.85		Gerät ein
U53	MP_U53	5 V		4.80		Gerät ein
U8_MOT	MP111-17	8 V		7.70	8.30	Gerät ein
U12	MPU12			U14-		
U51T	MPU51T	5 V	2%	4.90	5.1	Dauerspannung
U51	MPU51	5 V	2%	4.90	5.1	Dauerspannung

## Stromaufnahme

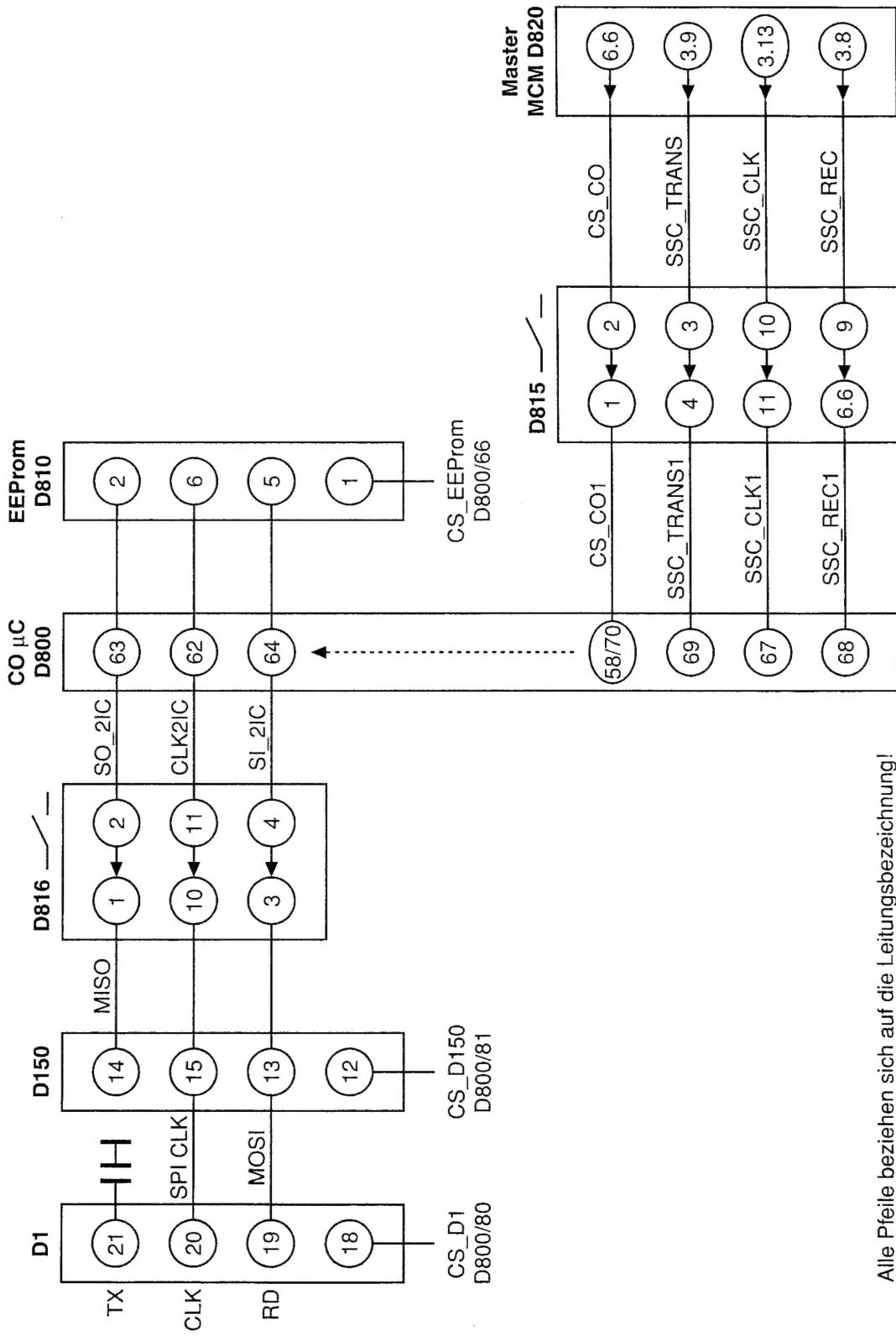
Zur Strommessung des Gerätes sind die Pins 4 (Kl.30) und 8 (Masse) der Kammer A des Anschlußkastens zu beschalten.

Betriebszustand	Stromaufnahme / mA	Kommentar
Gerät aus	< 3	Gerät muß vorher einmal an gewesen sein, damit CAN-Tranceiver initialisiert wird.
Gerät ein	1000 bis 1100	Bei Erstkontakteierung mit eingelegter NAV-CD.
Gerät ein	ca. 900	NAV-CD im Gerät aber Laufwerk steht. Radiobetrieb (FM).
Gerät ein	ca. 880	Audio-CD im Gerät und läuft. Audio-CD-Betrieb.
NAVI-Nachlauf	< 330	30 Min.
Lüfter an	+ 70 (max.)	Wenn Lüfter voll läuft erhöht sich die Stromaufnahme des Gerätes um max. 70 mA.

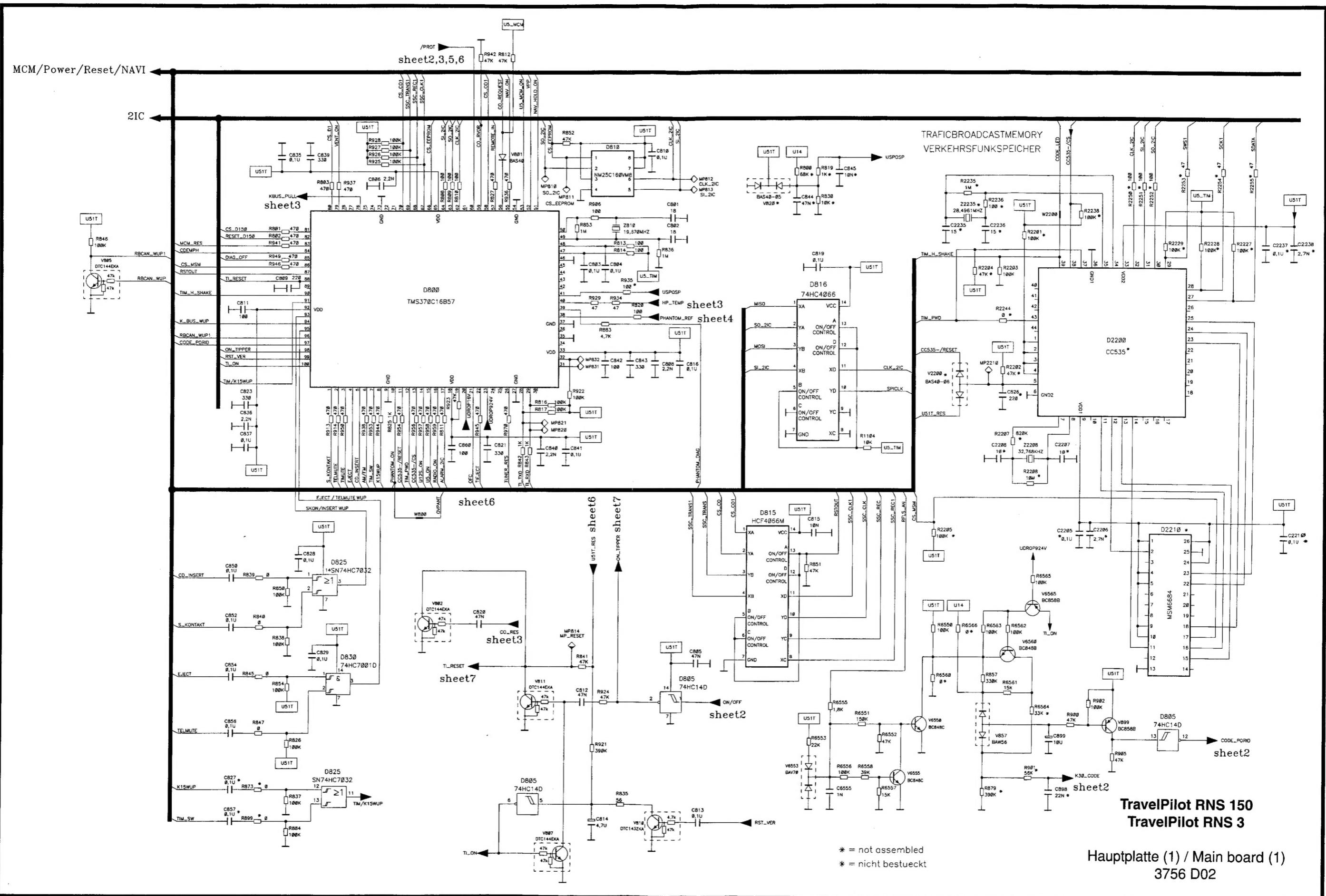
## Spannungsversorgung

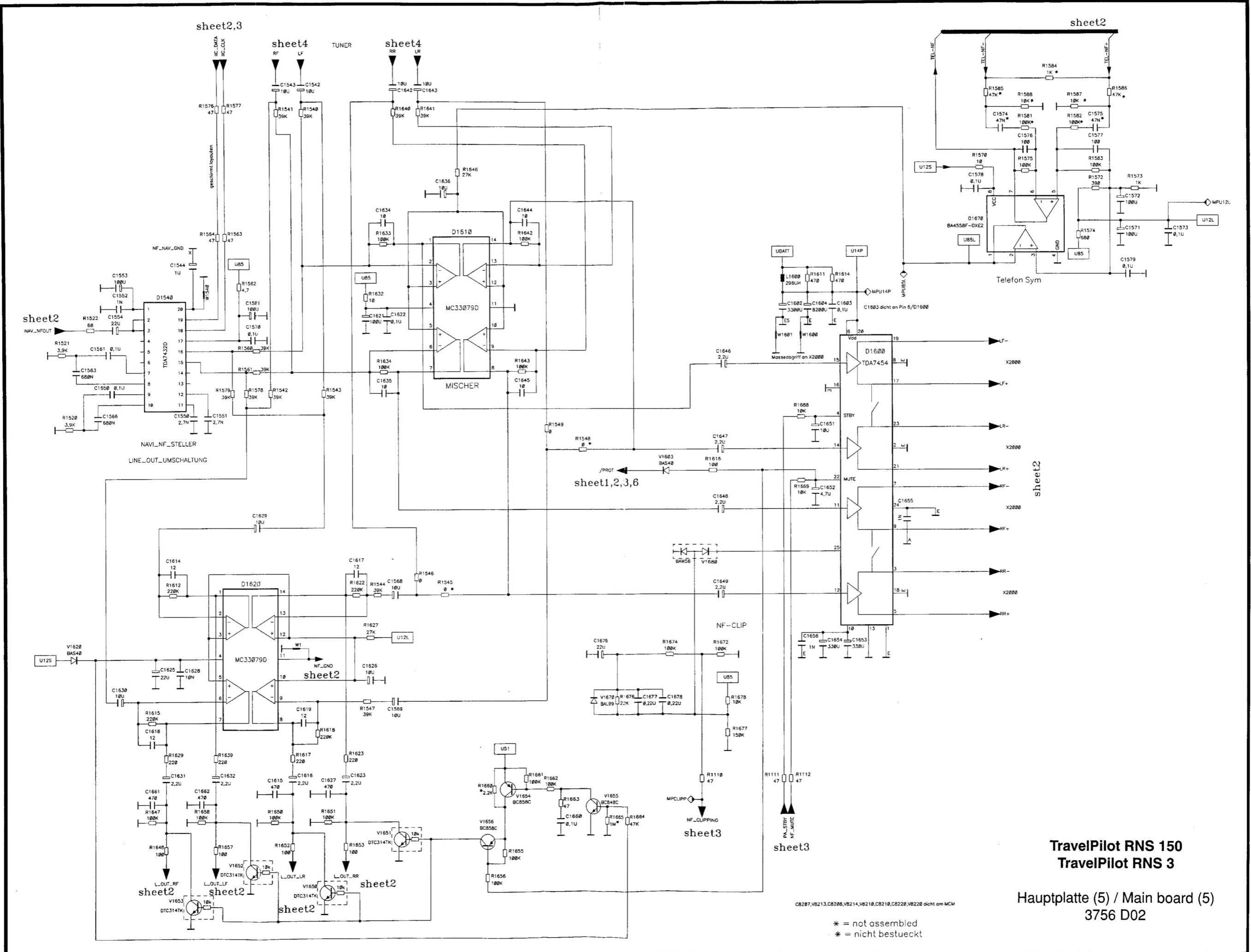


# RNS 150 / RNS 3 SPI-BUS (Serial Periphery Interface)



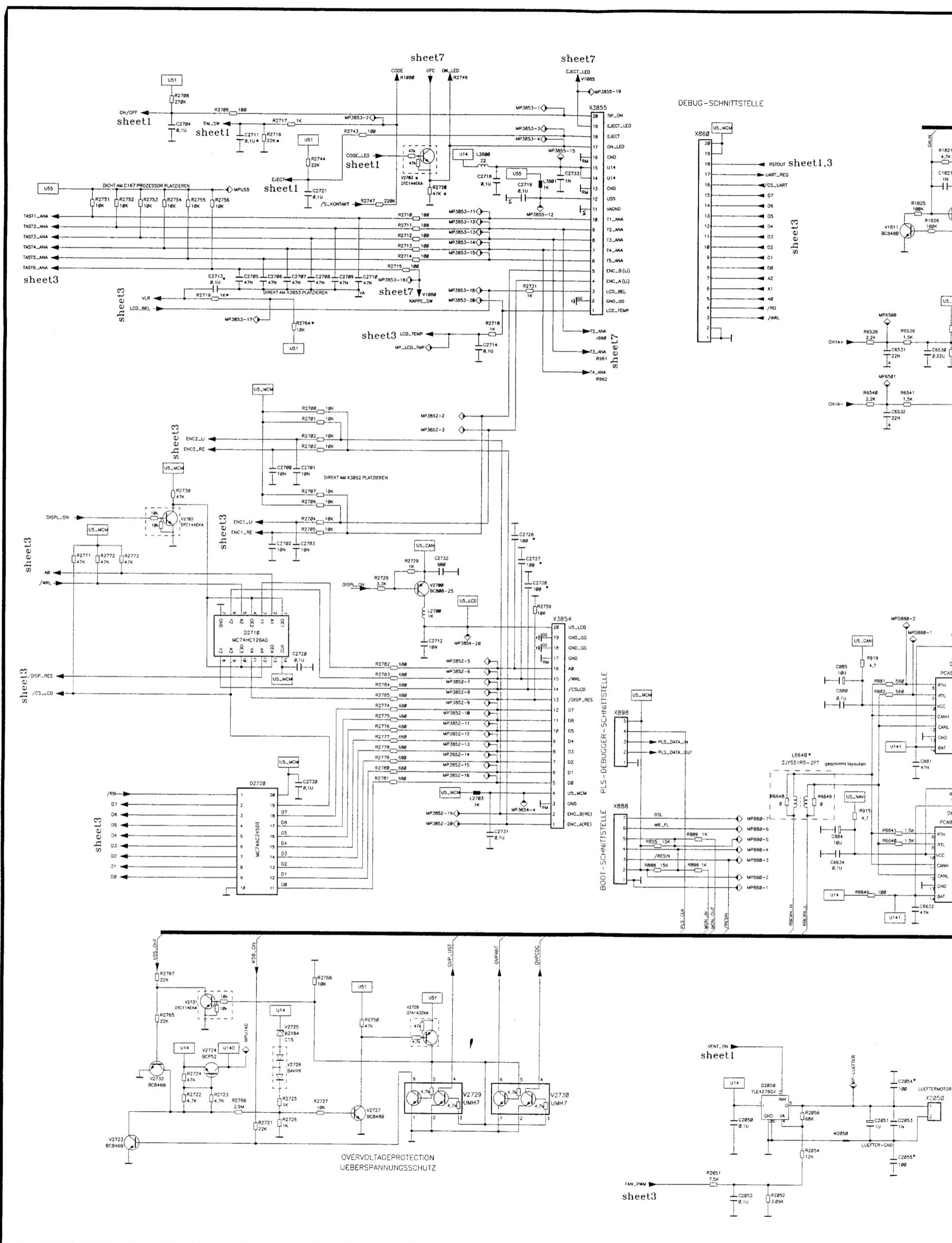
Alle Pfeile beziehen sich auf die Leitungsbezeichnung!

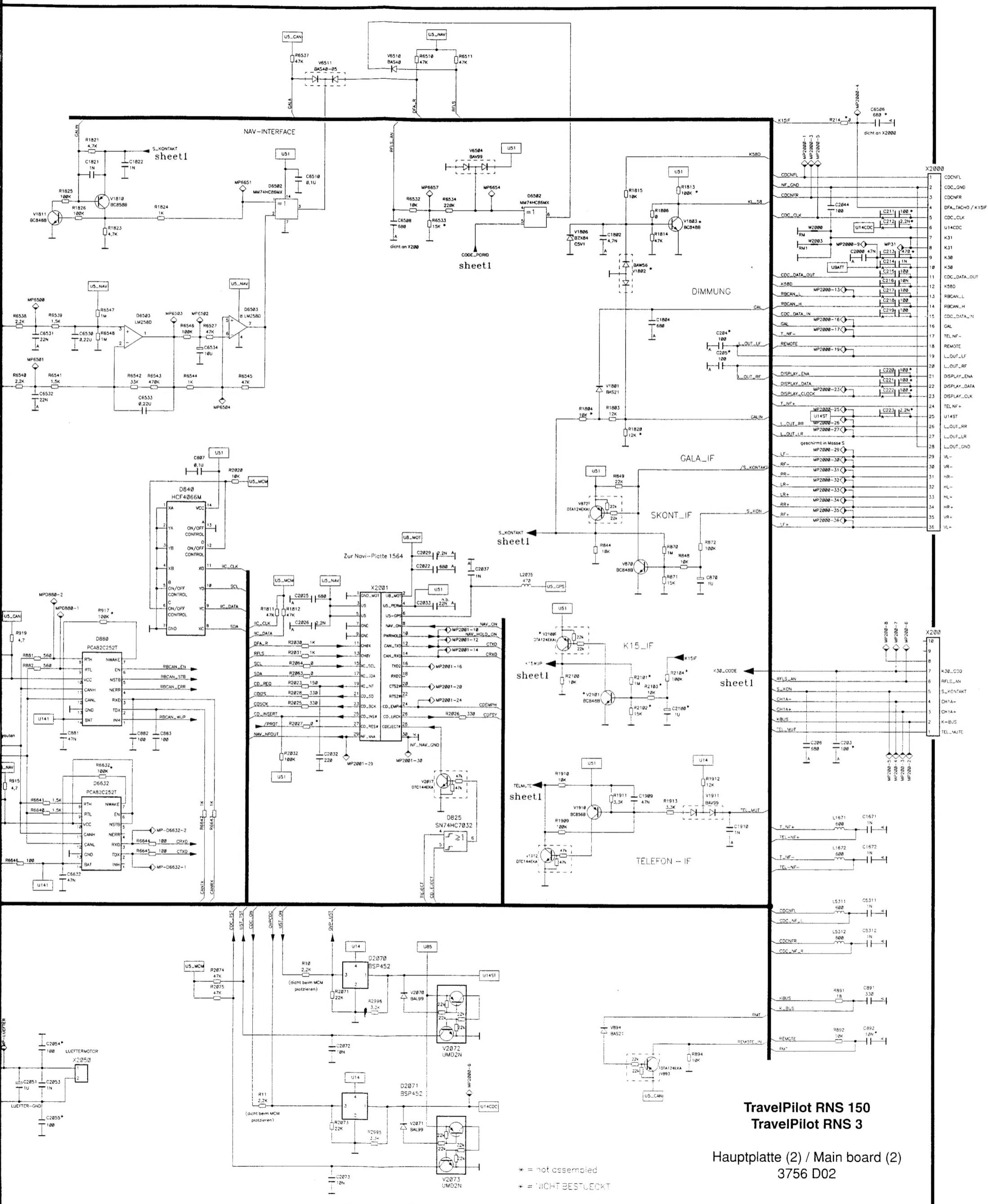




**TravelPilot RNS 150**  
**TravelPilot RNS 3**

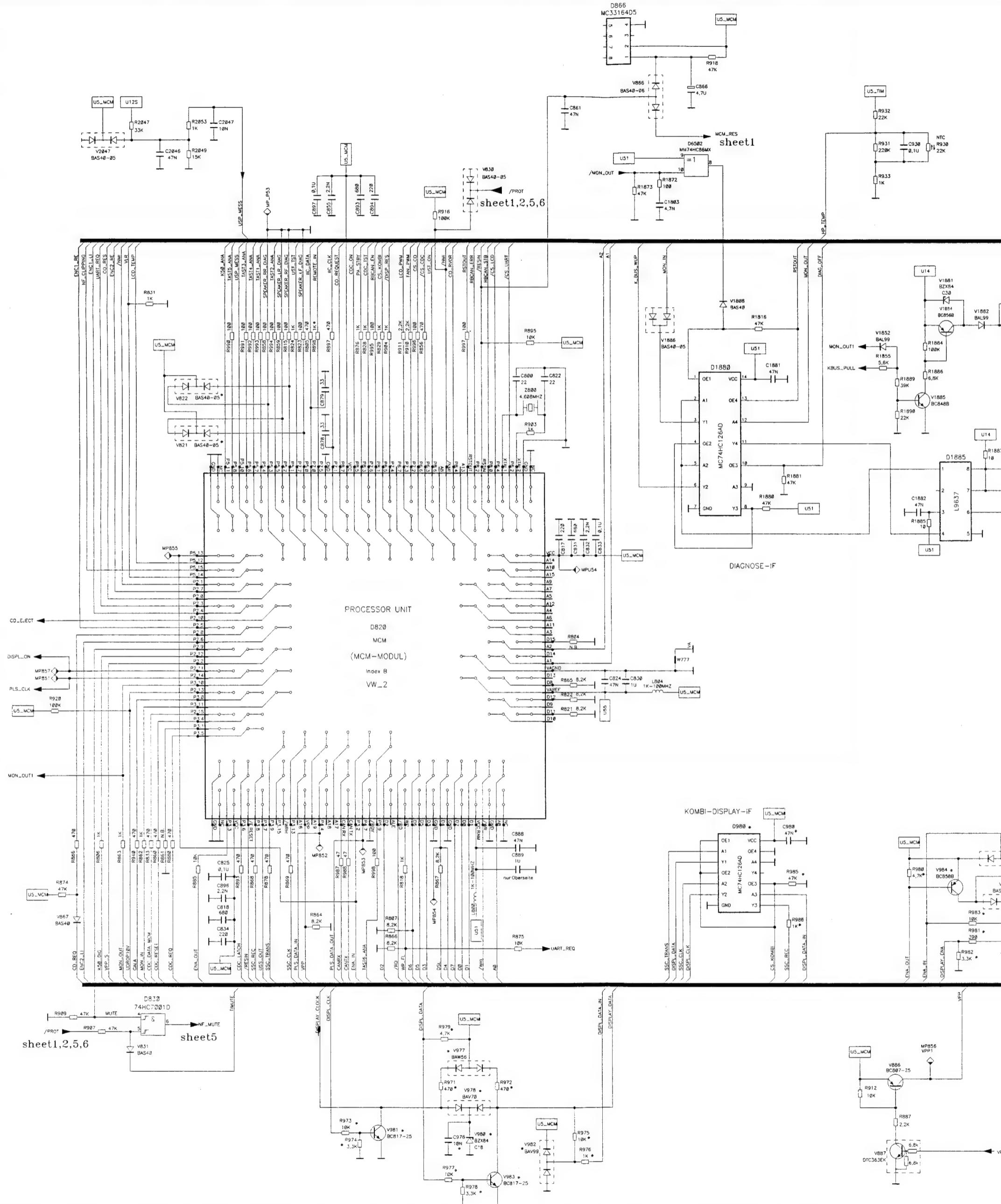
Hauptplatte (5) / Main board (5)  
3756 D02

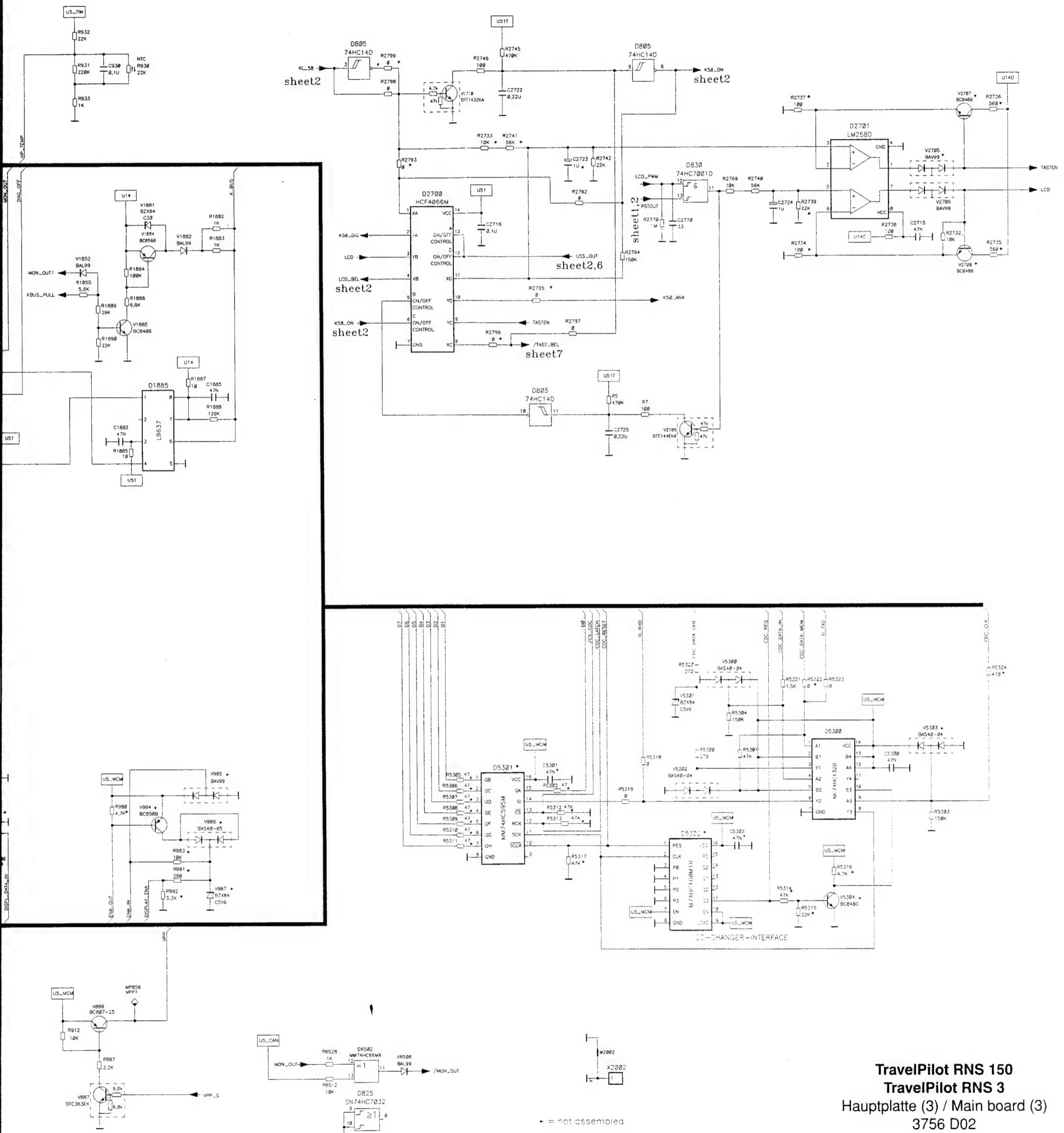




TravelPilot RNS 150  
TravelPilot RNS 3

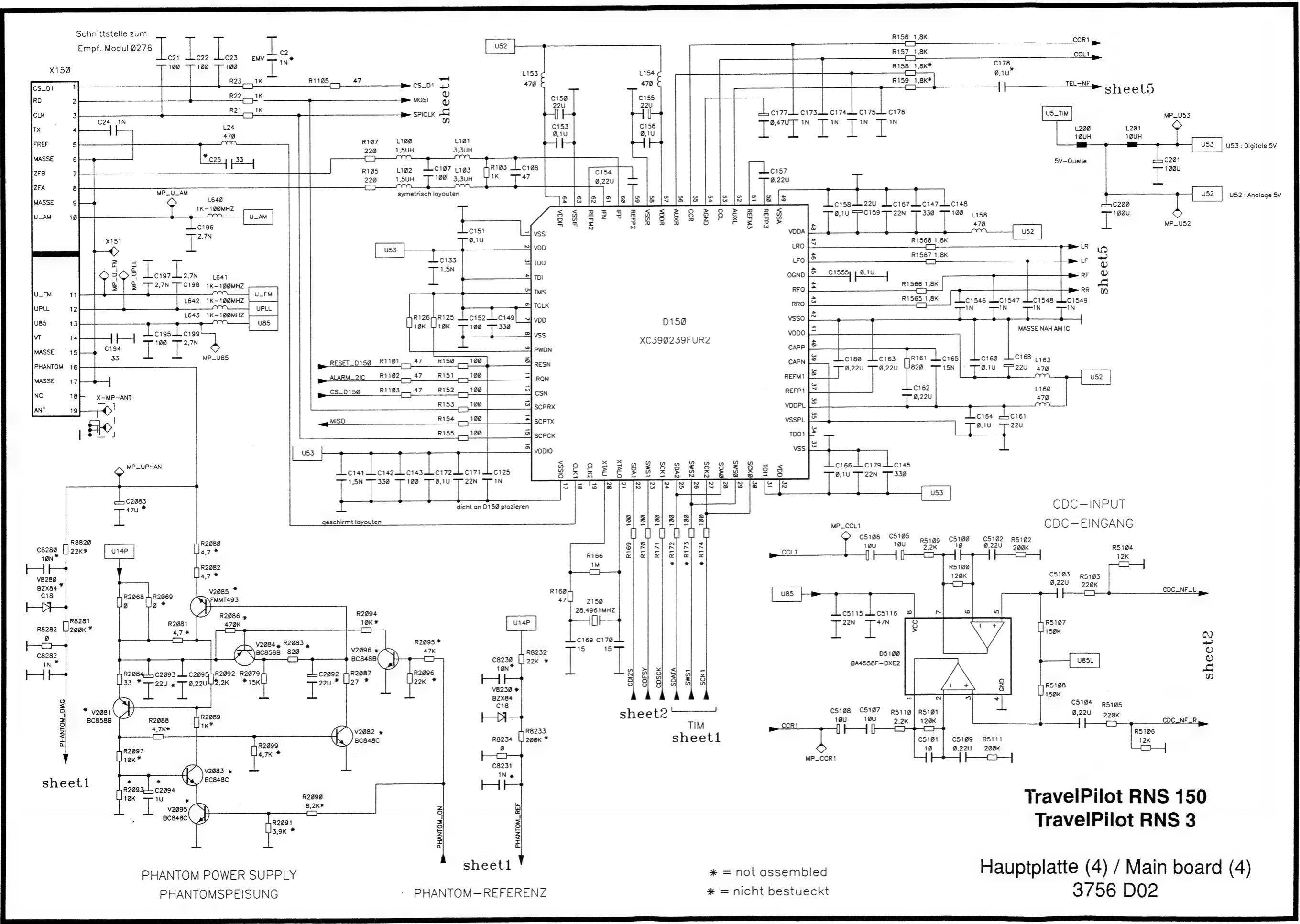
Hauptplatte (2) / Main board (2)  
3756 D02

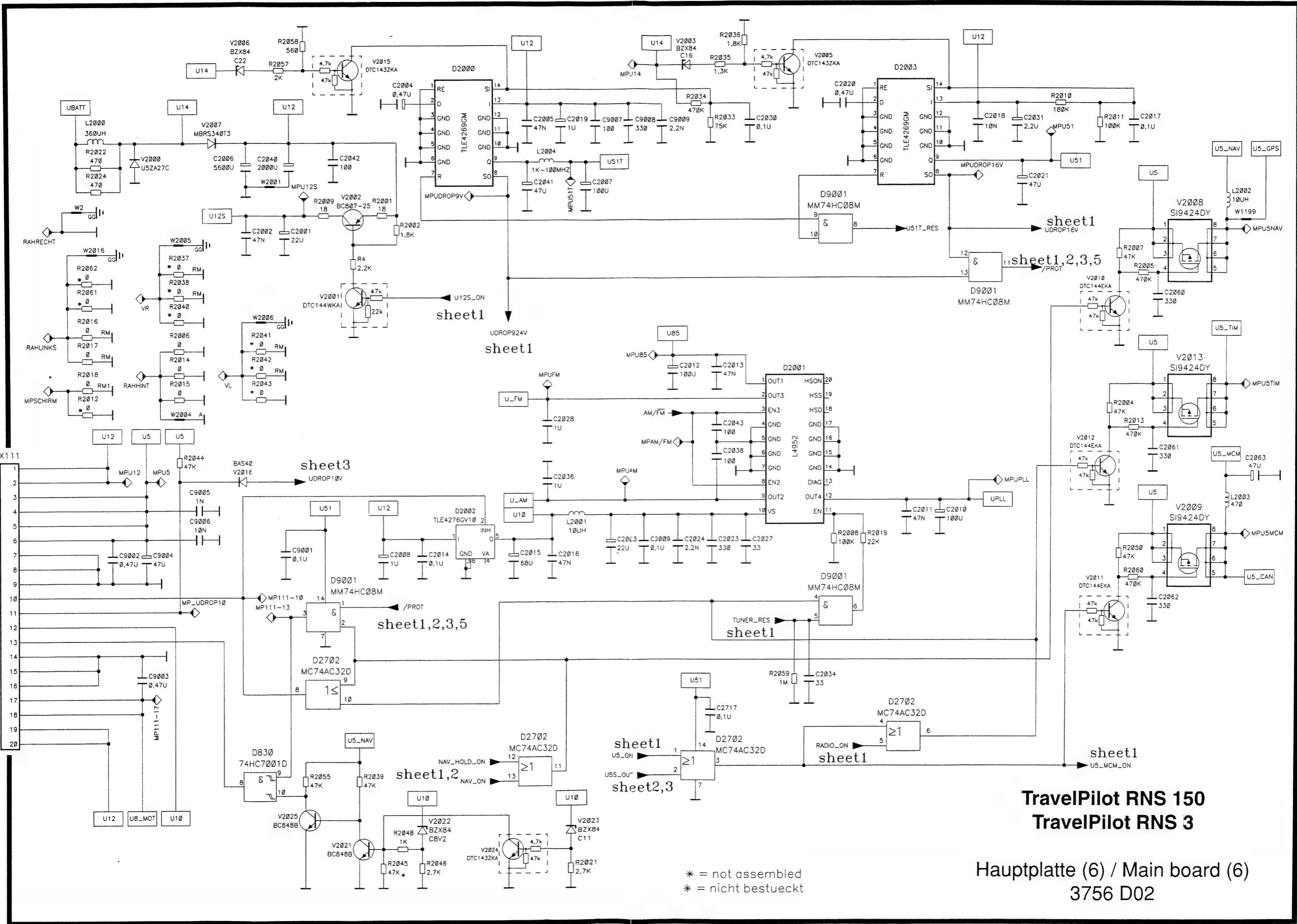




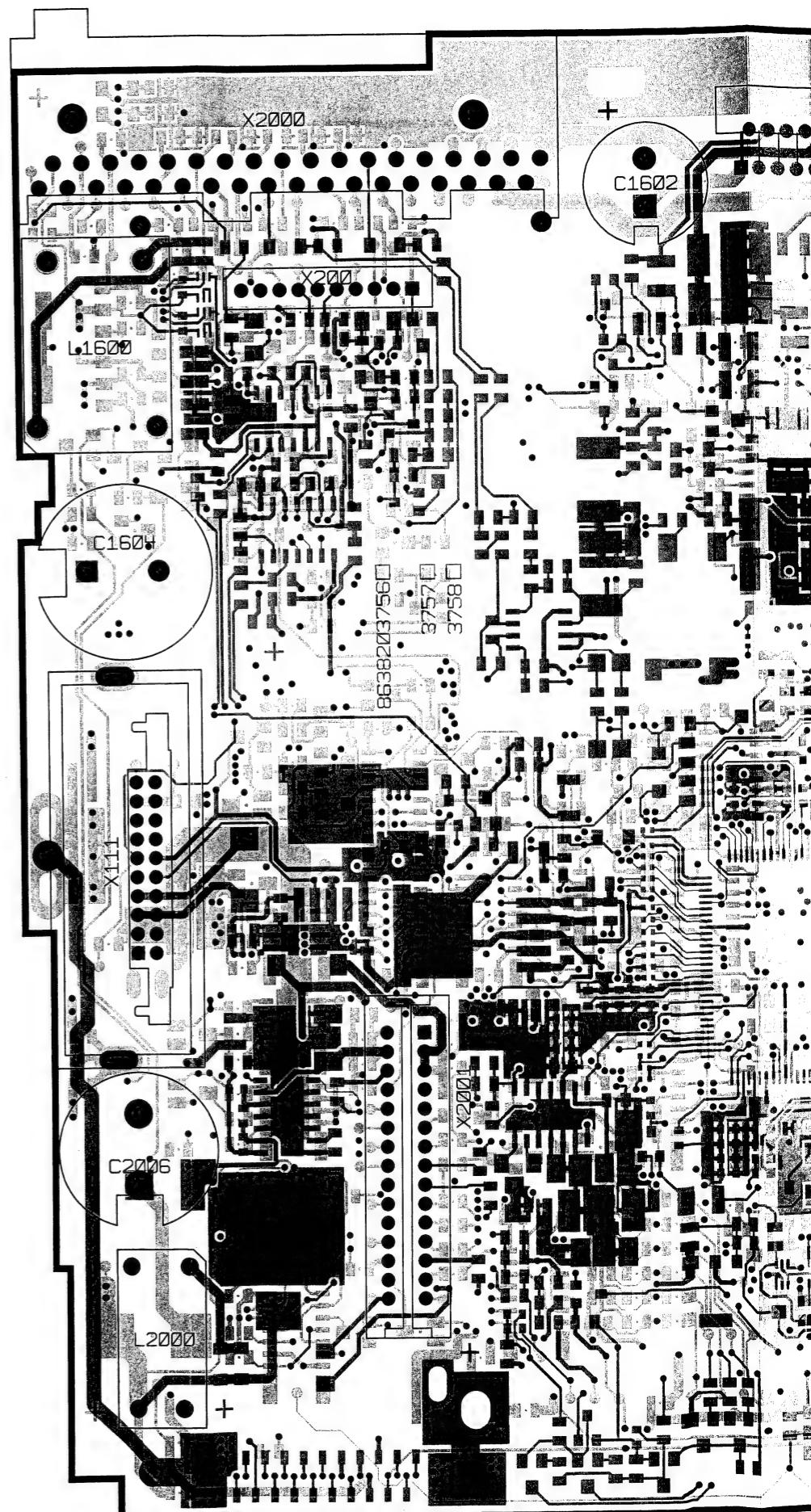
**TravelPilot RNS 150**  
**TravelPilot RNS 3**

Hauptplatte (3) / Main board (3)  
3756 D02



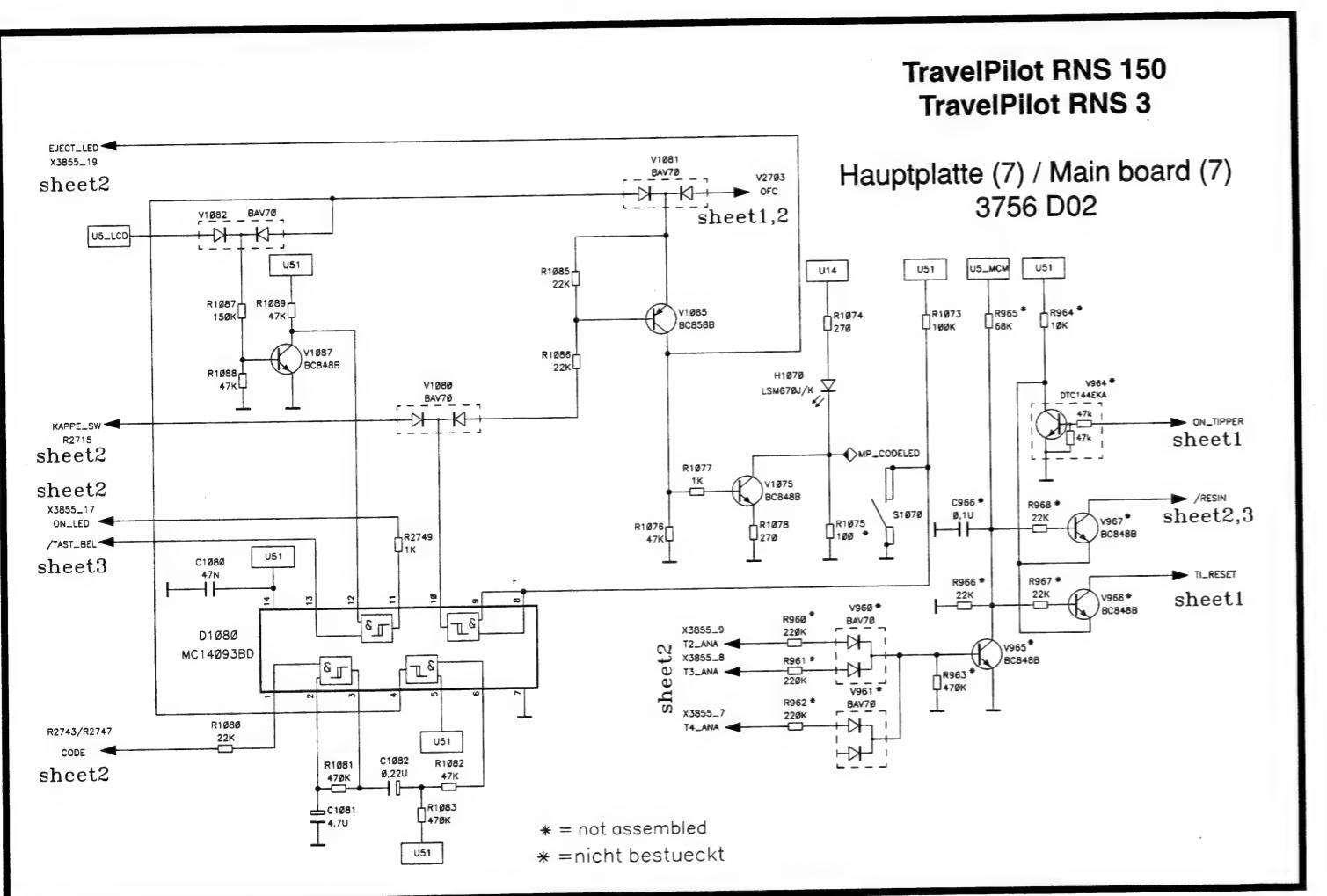


**Hauptplatte  
Main board  
PL 3756 D02**



**TravelPilot RNS 150**  
**TravelPilot RNS 3**

Hauptplatte (7) / Main board (7)  
3756 D02



**Hauptplatte  
Main board  
PL 3756 D02**

1



**RNS 3**

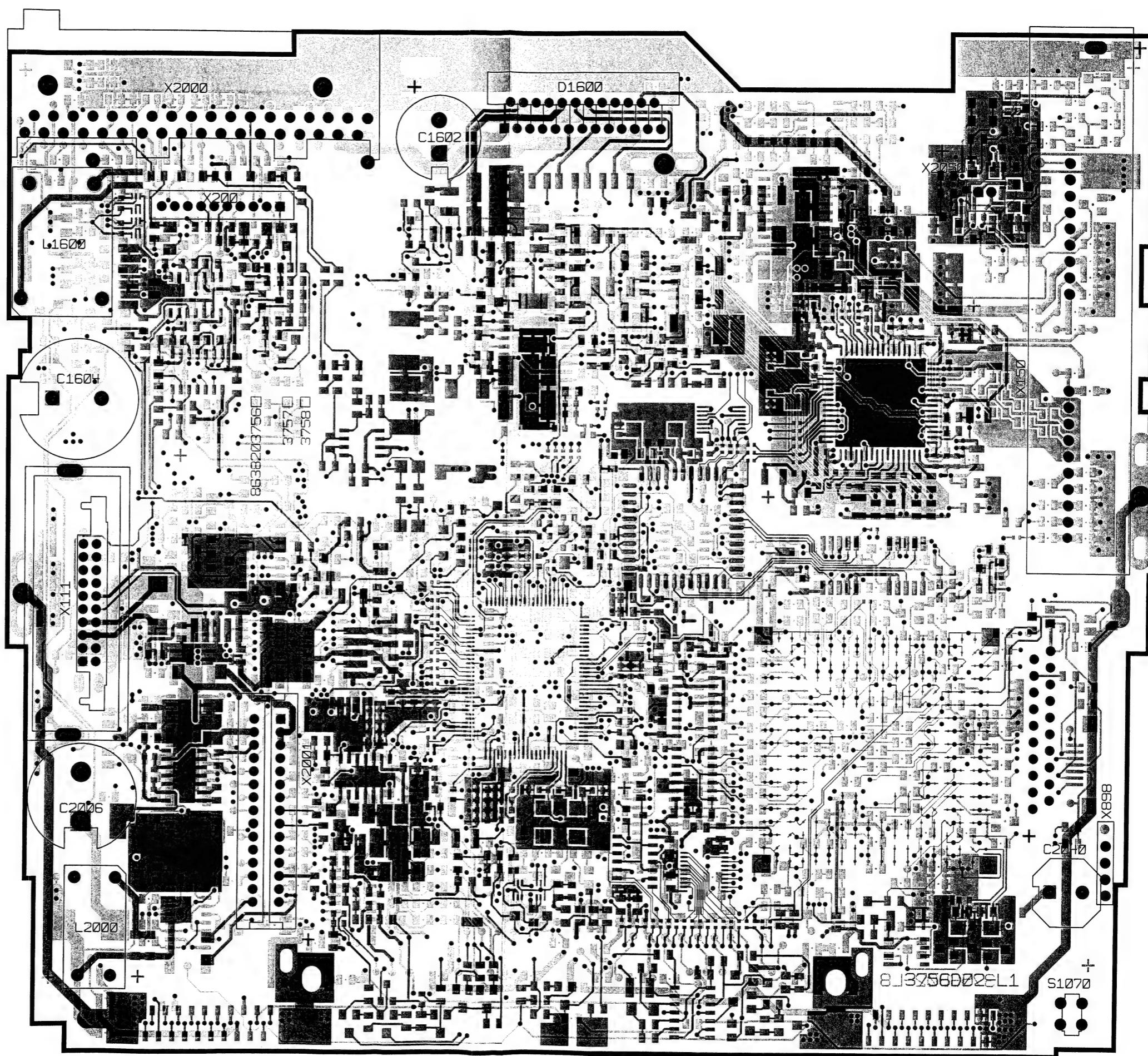
ain board (7)  
2

```

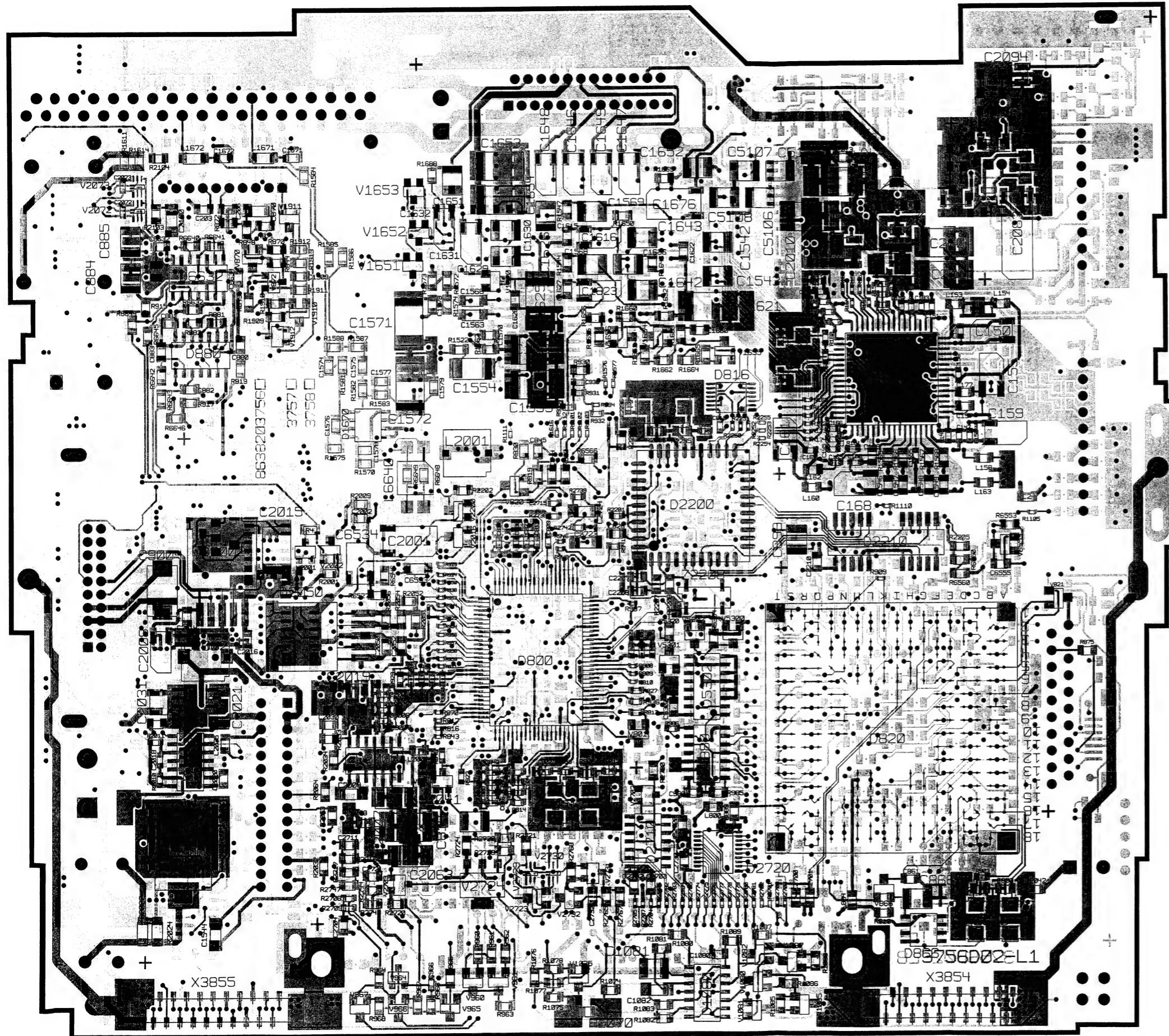
graph LR
    V964[V964*] --> J14EKA[J14EKA]
    J14EKA --> 437k[437k]
    437k --> 17k[17k]
    17k --> ON_TIPPER[ON_TIPPER sheet1]
  
```

/RESIN  
sheet2,3

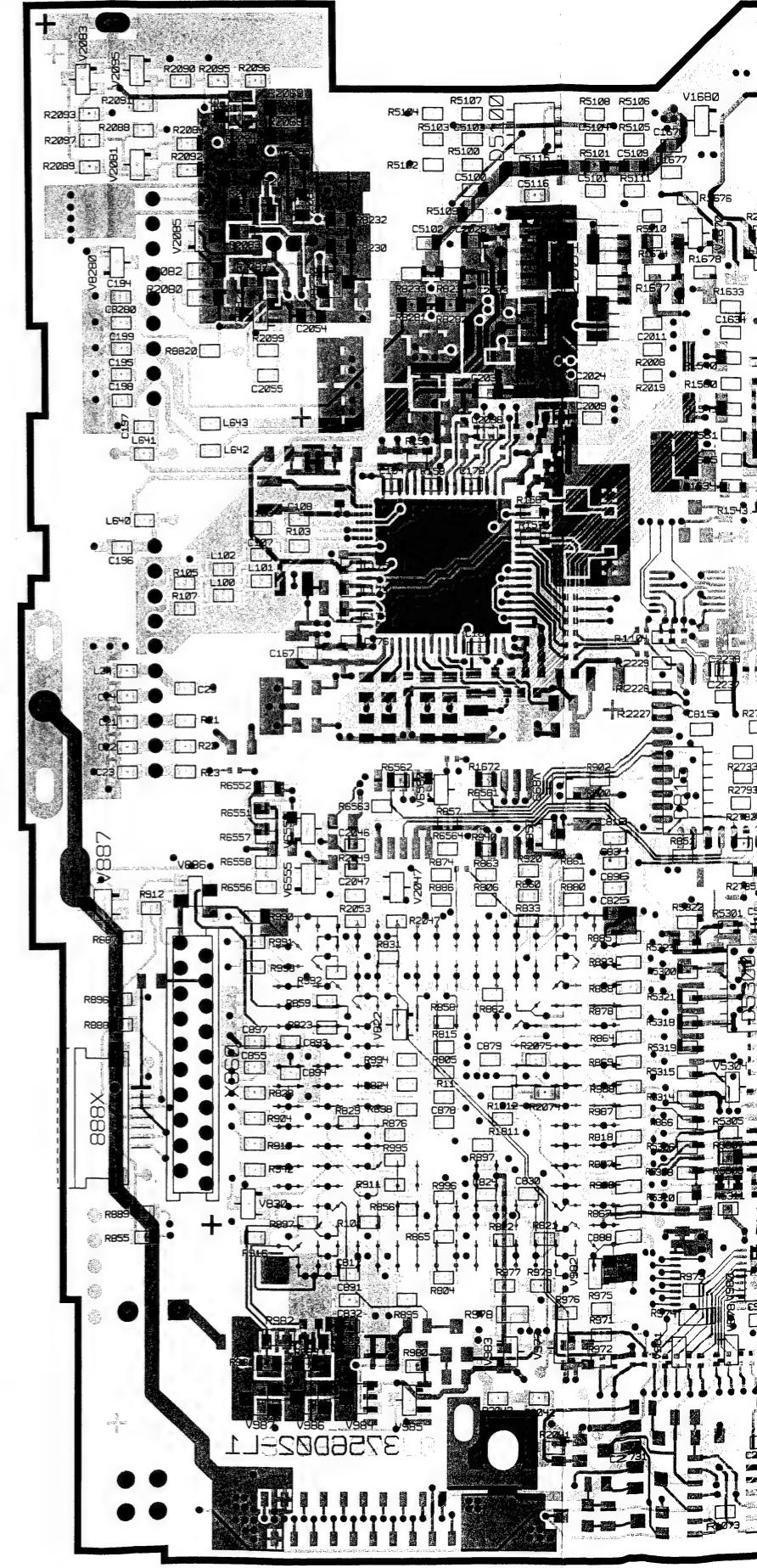
TI RESET  
sheet 1



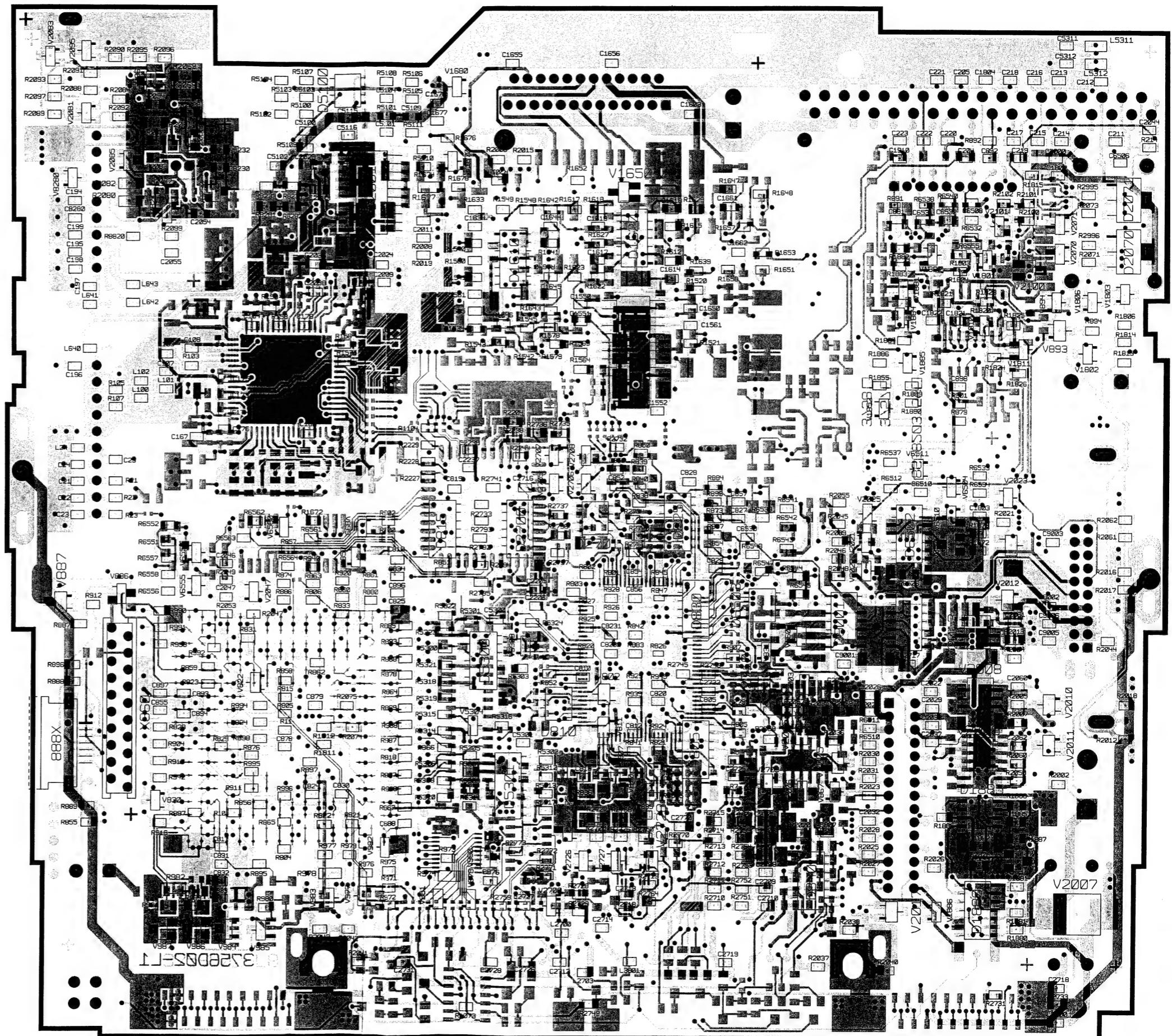
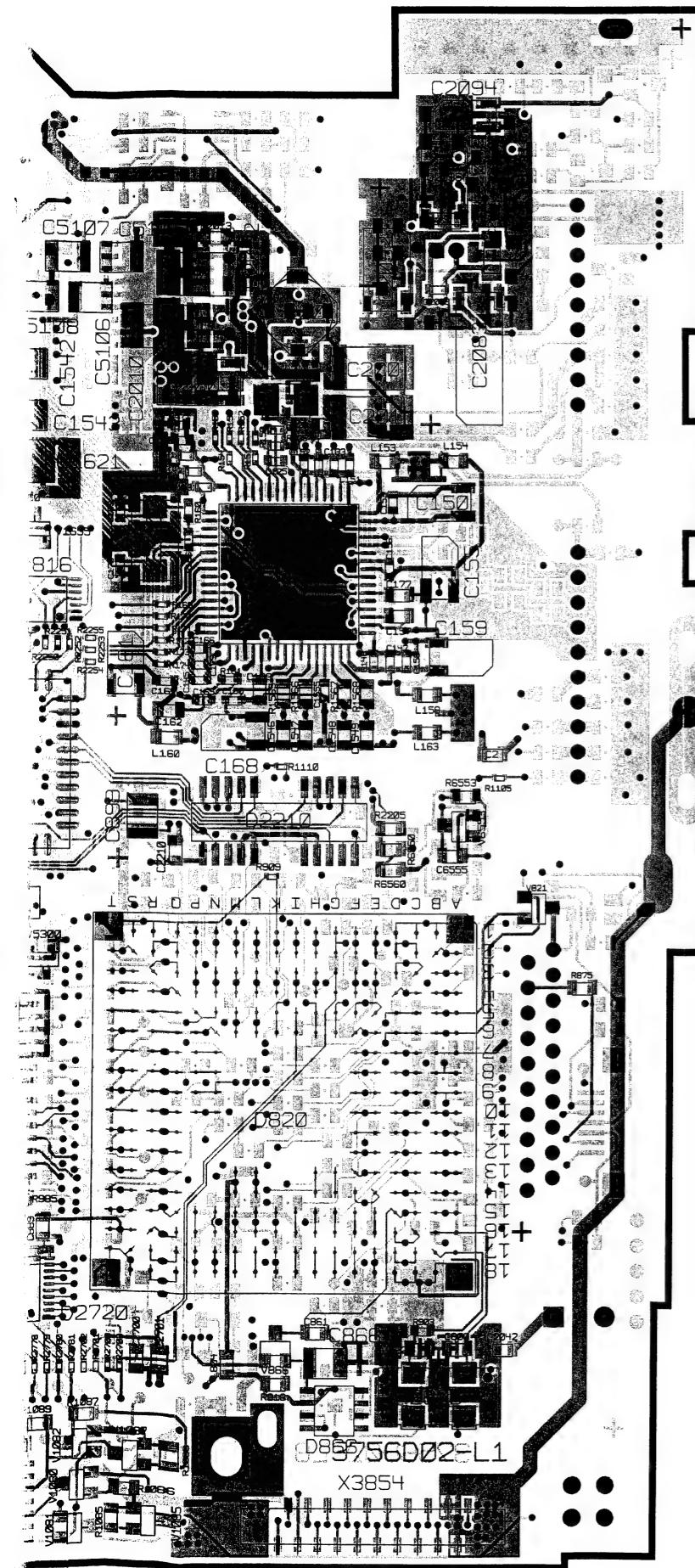
**Hauptplatte  
Main board  
PL 3756 D02  
Chip**



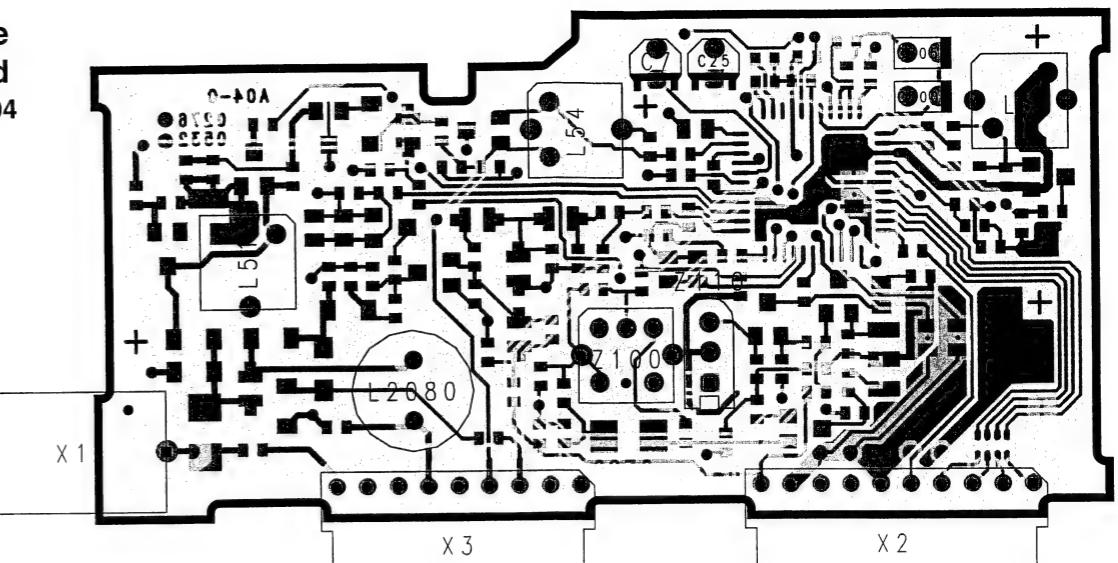
**Hauptplatte  
Main board  
PL 3756 D02  
B + Chip**



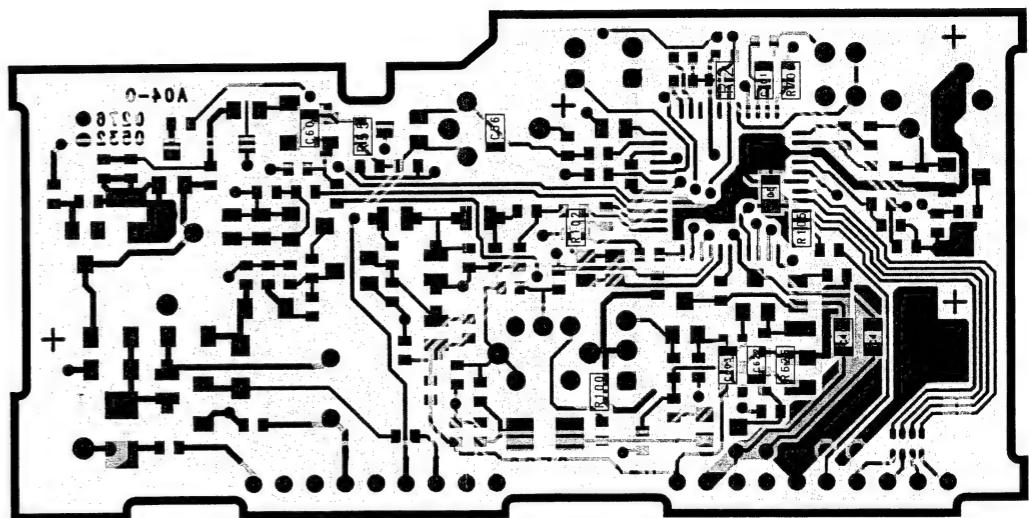
**Hauptplatte  
Main board  
PL 3756 D02  
B + Chip**



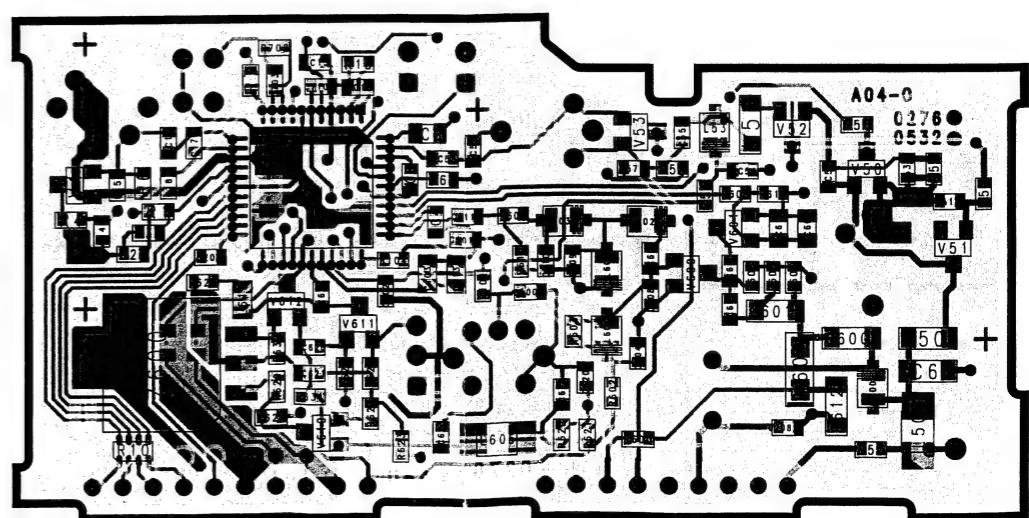
**HF-Platte  
RF board  
PL 0276 A04**

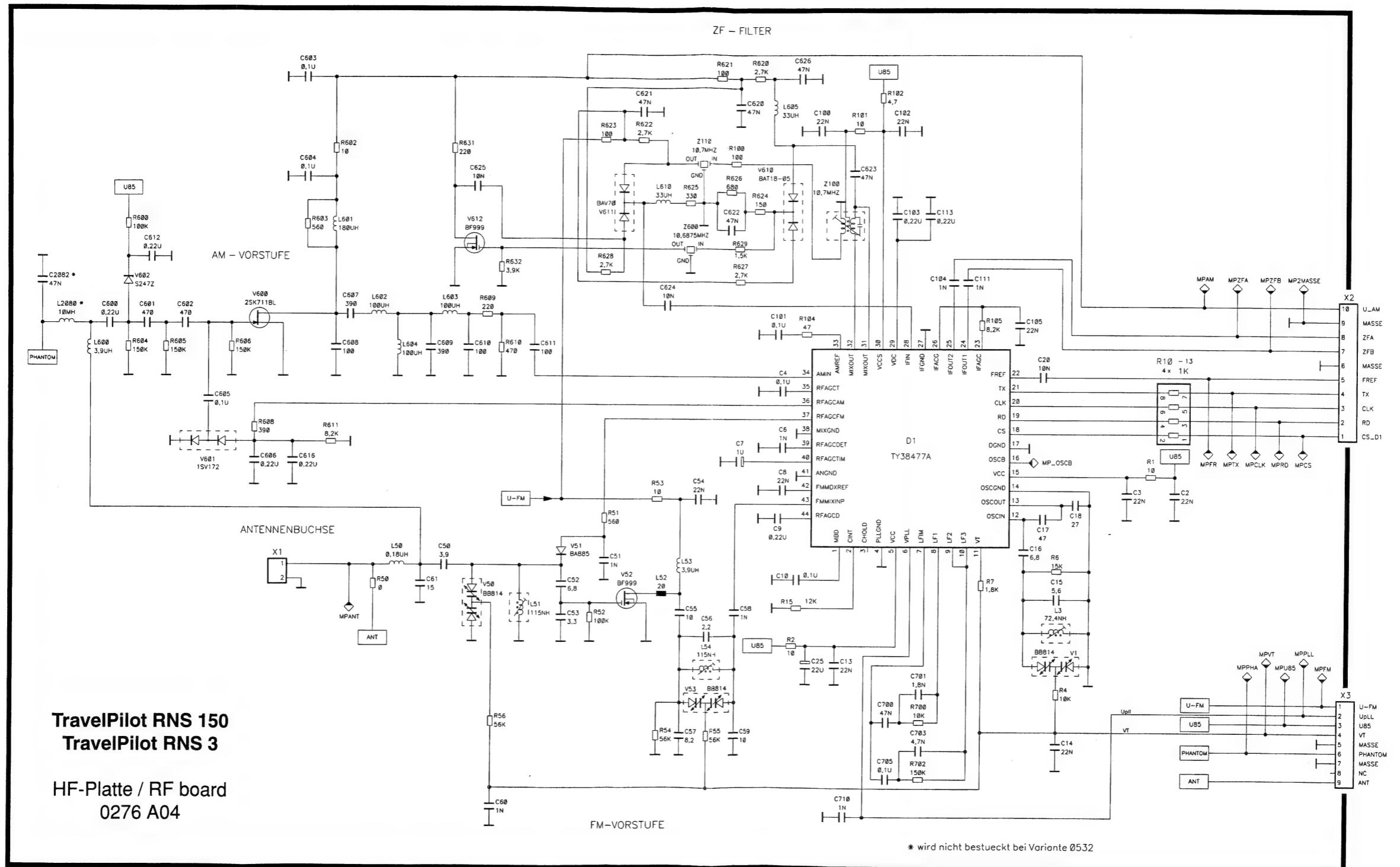


**HF-Platte  
RF board  
PL 0276 A04**

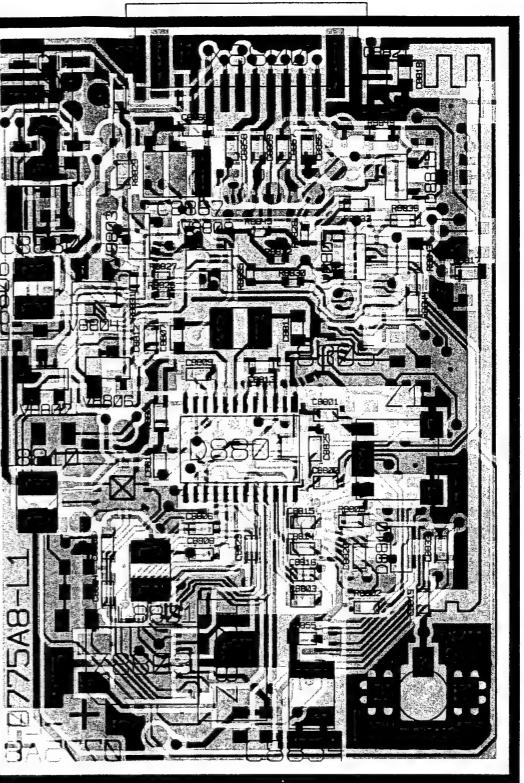


**HF-Platte  
RF board  
PL 0276 A04  
Chip**

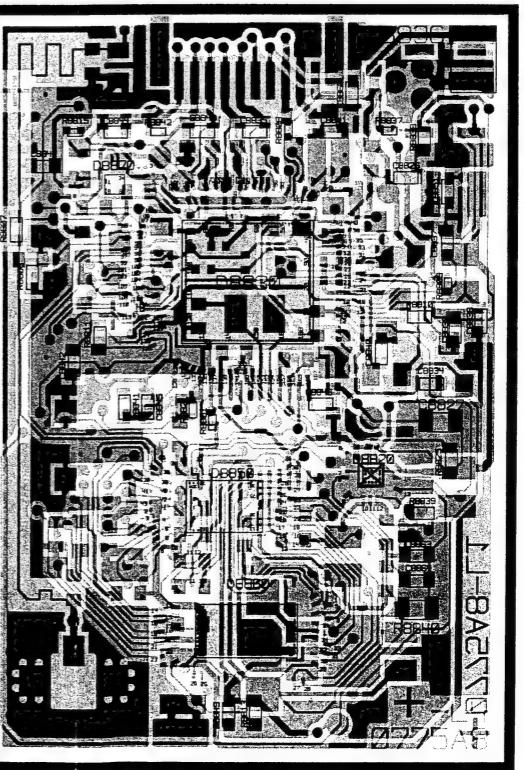


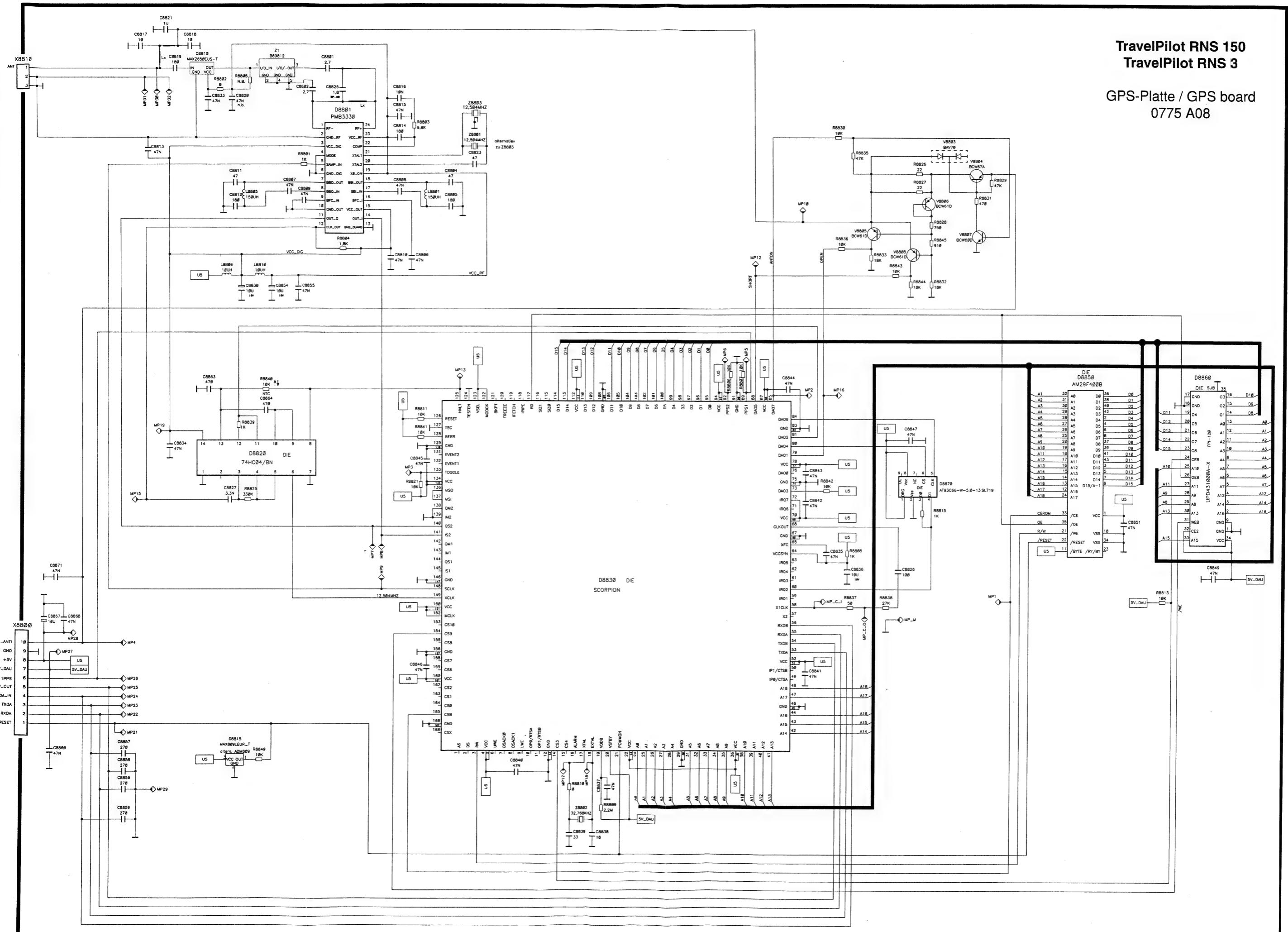


GPS-Platte  
GPS board  
PL 0775 A08  
Chip



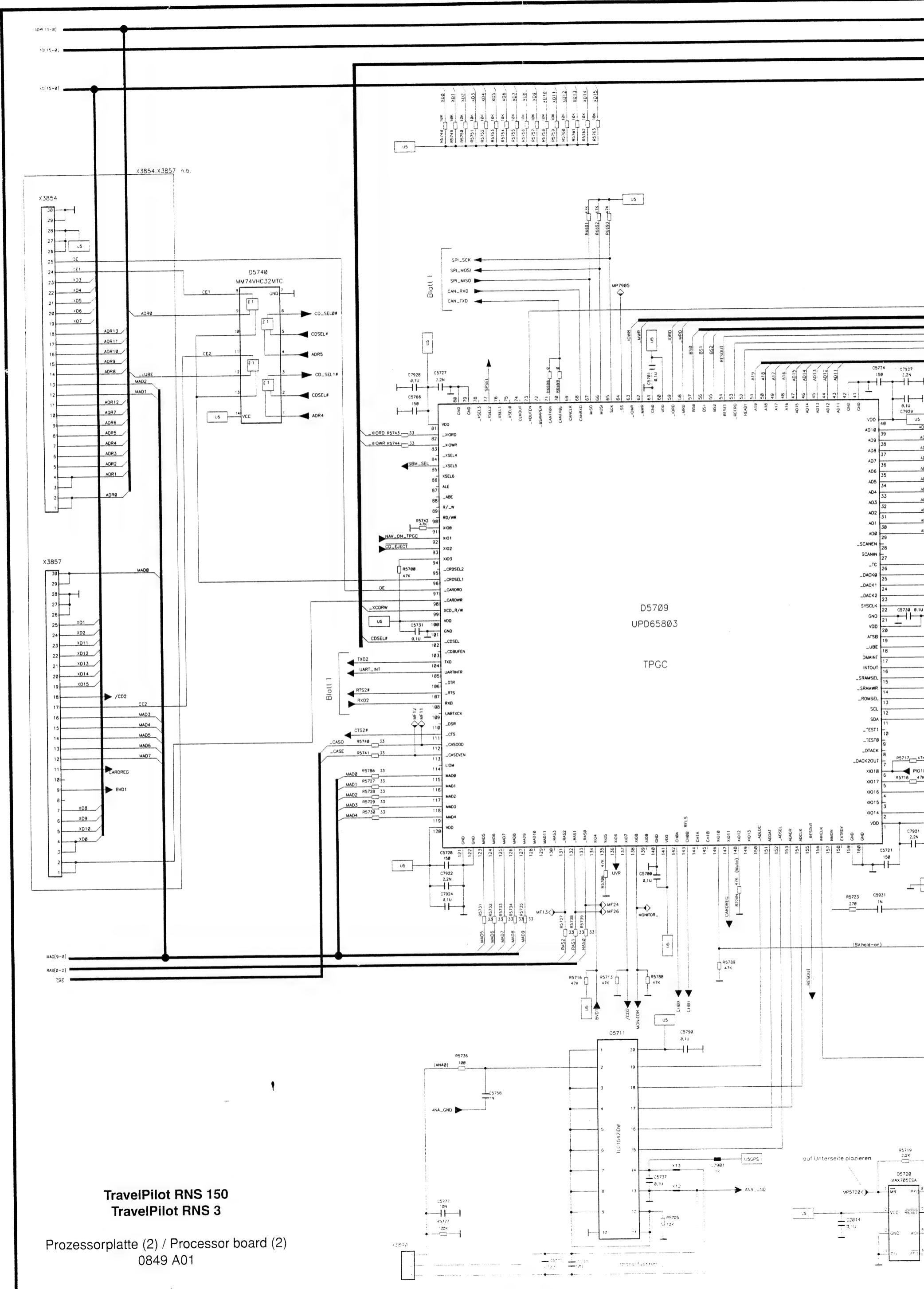
GPS-Platte  
GPS board  
PL 0775 A08  
Chip





**TravelPilot RNS 150**  
**TravelPilot RNS 3**

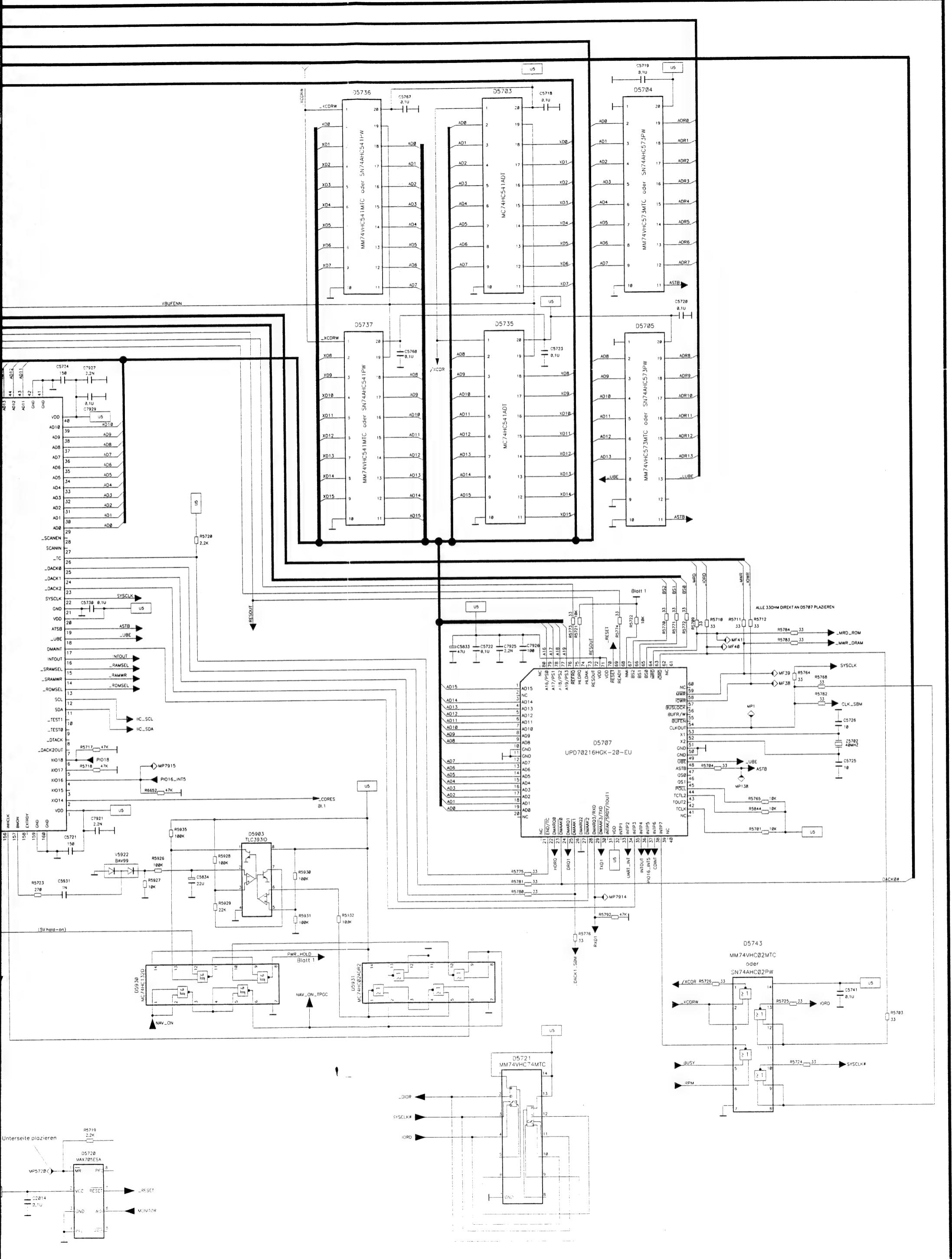
GPS-Platte / GPS board  
0775 A08

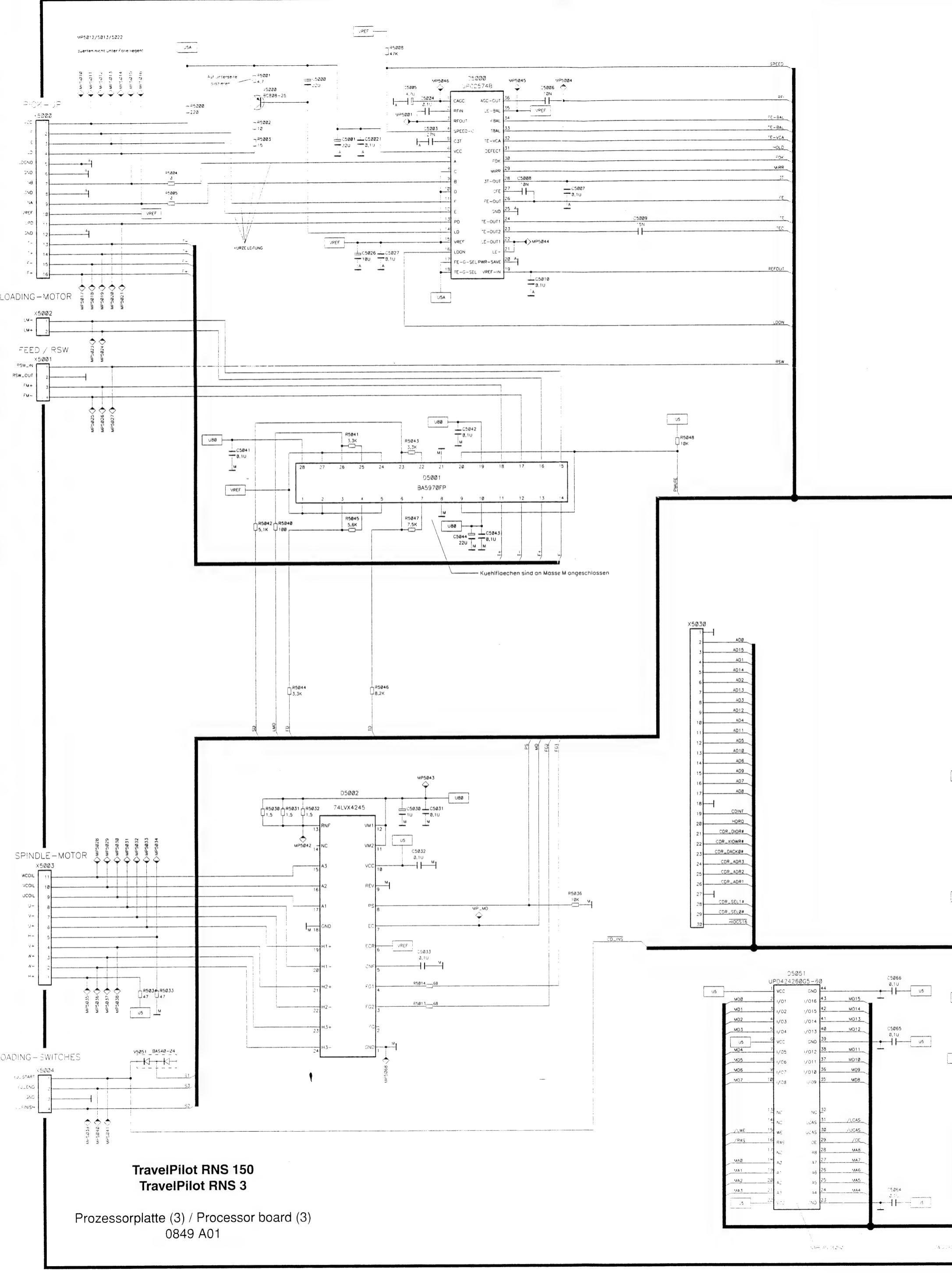


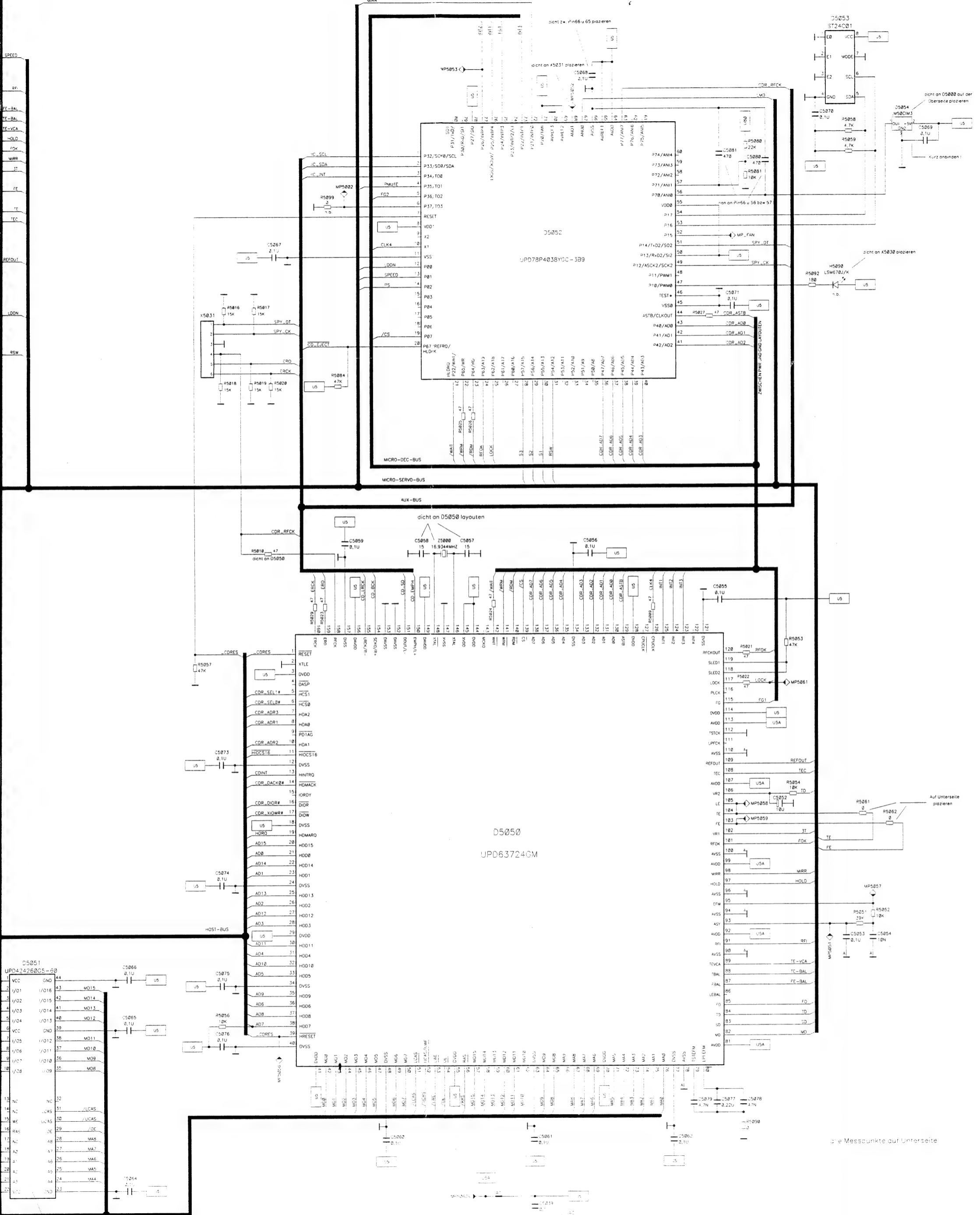
## **TravelPilot RNS 150**

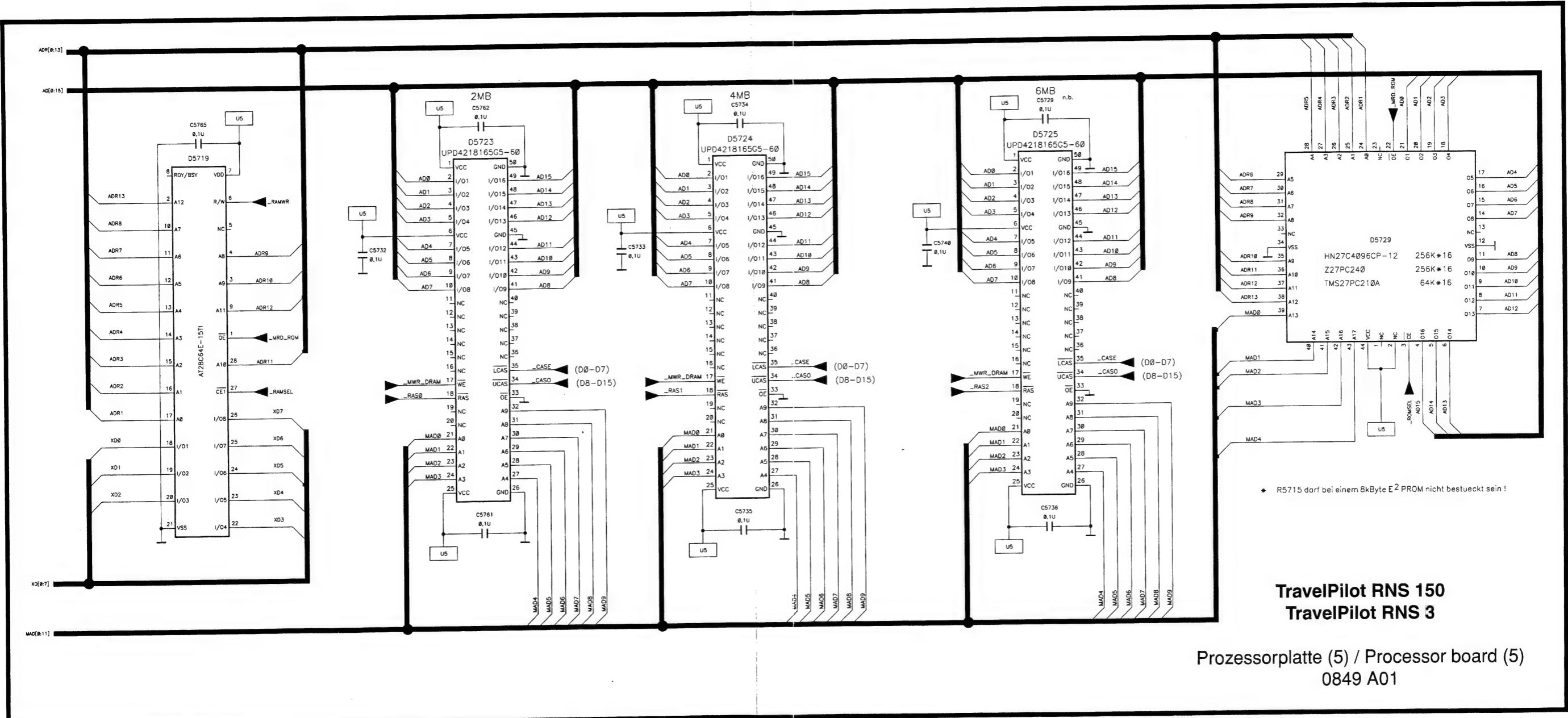
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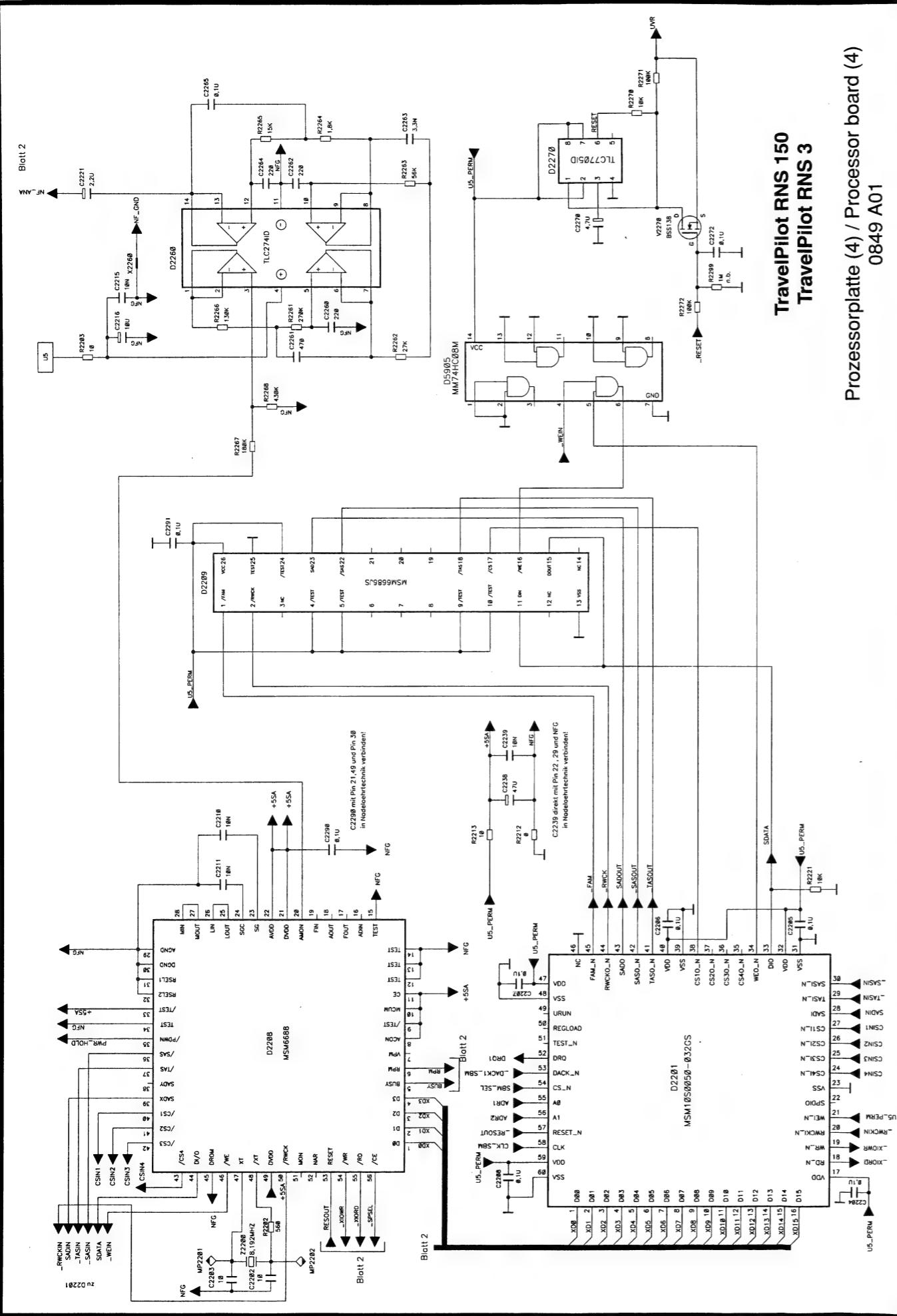
Prozessorplatte (2) / Processor board (2)  
0849 A01







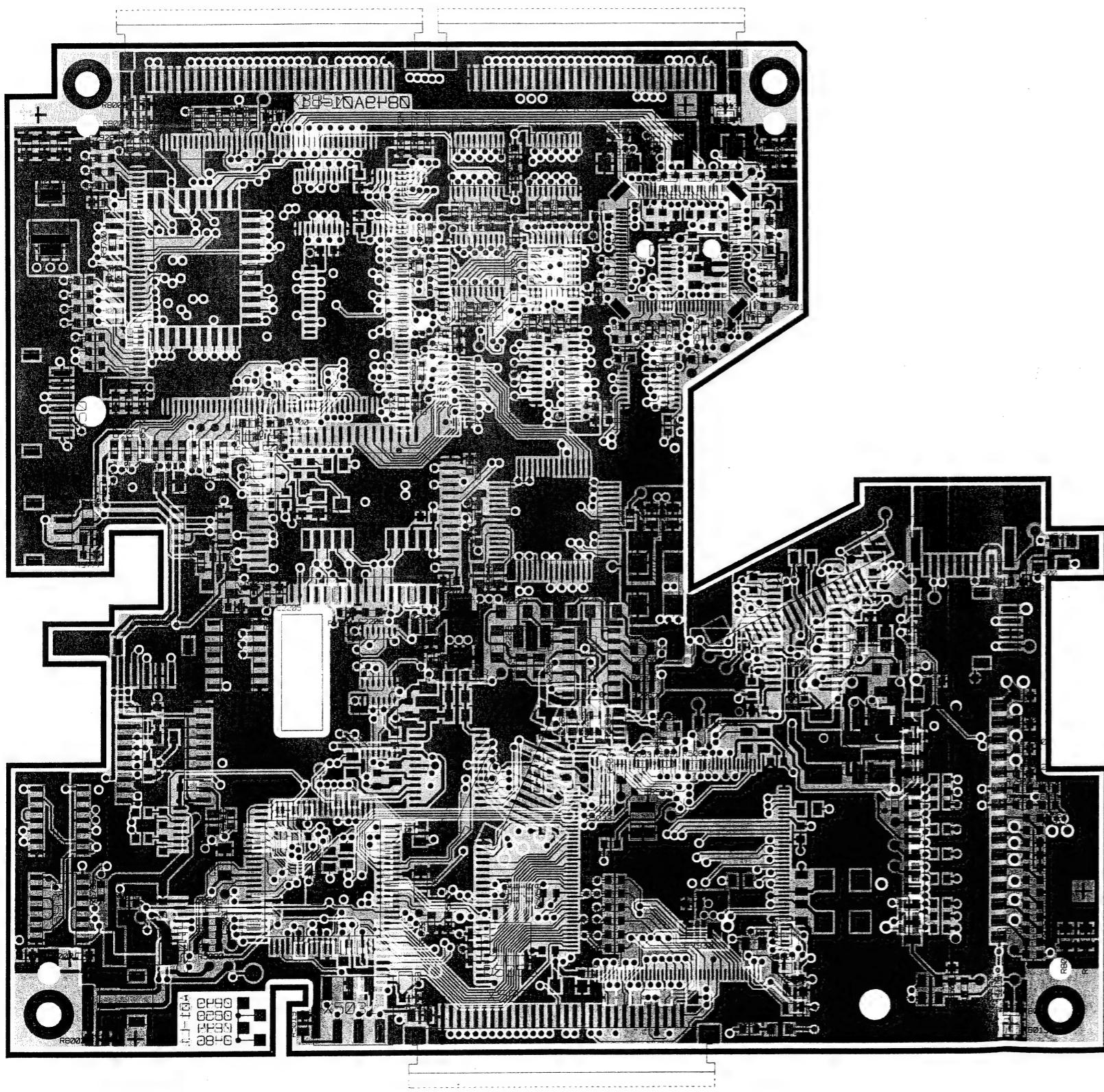




Prozessor-Platte  
Processor board

PL 0849 A01

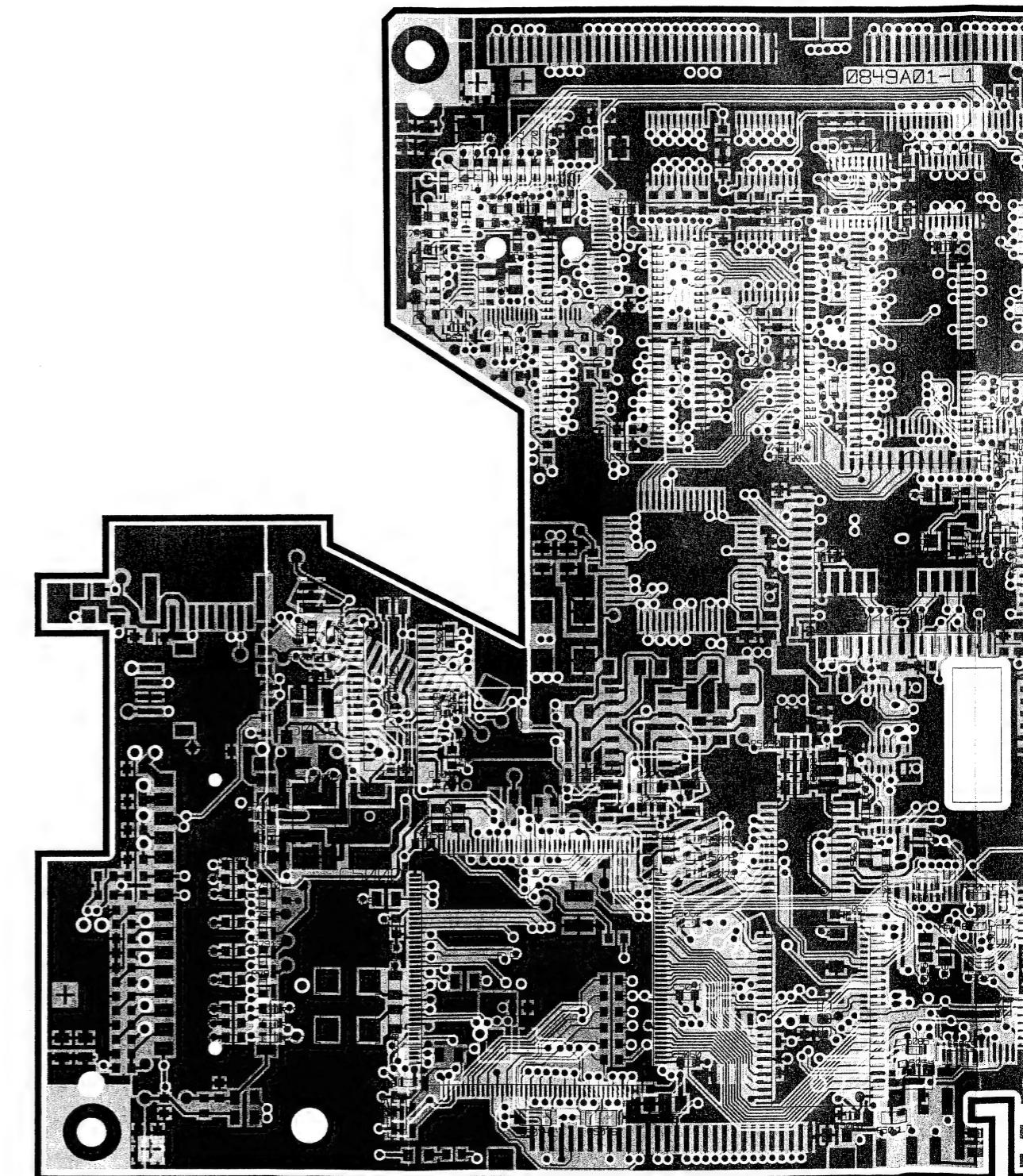
Chip



Prozessor-Platte  
Processor board

PL 0849 A01

Chip

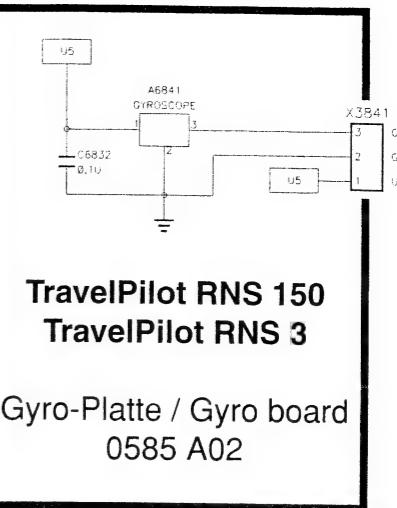
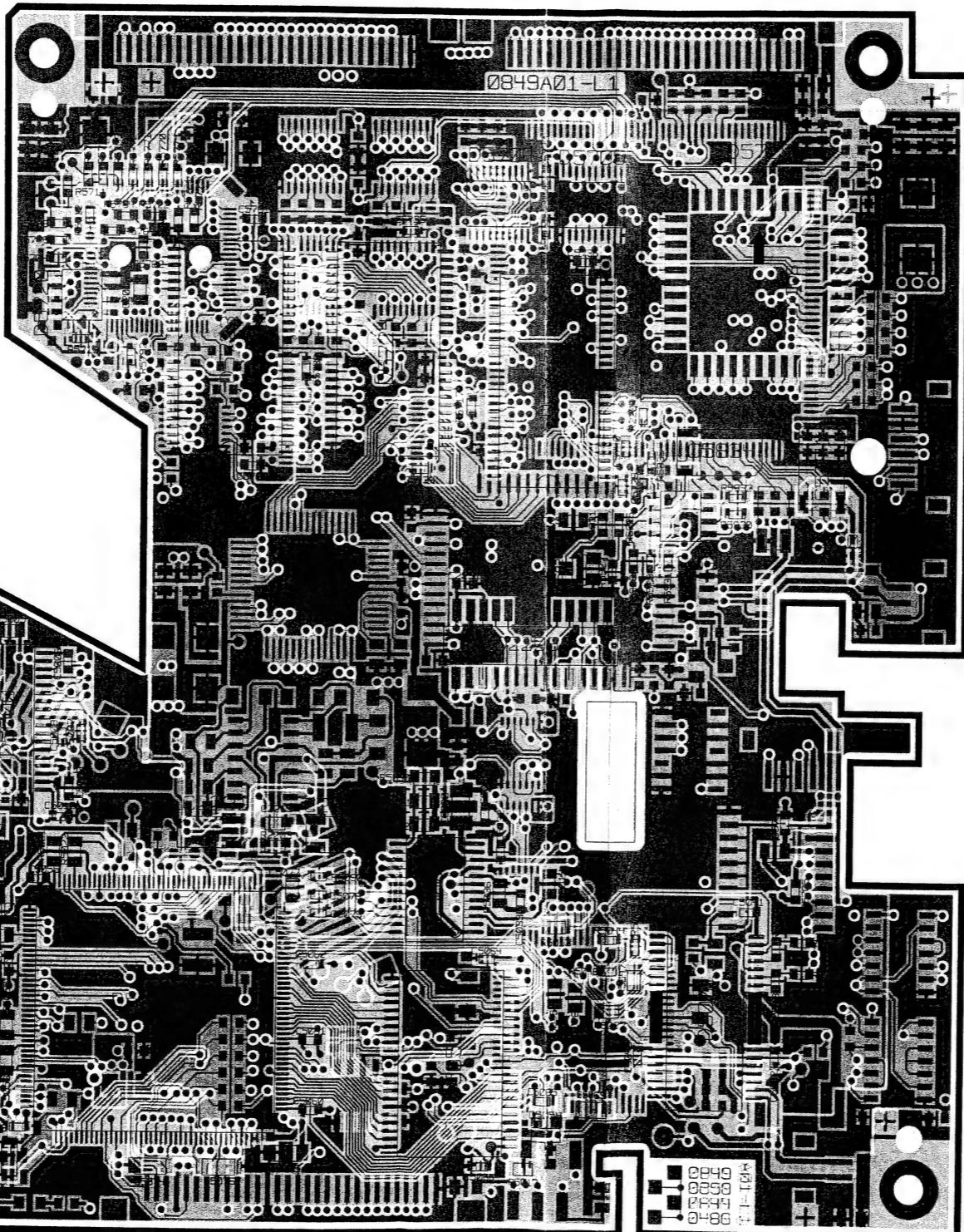


Prozessor-Platte

Processor board

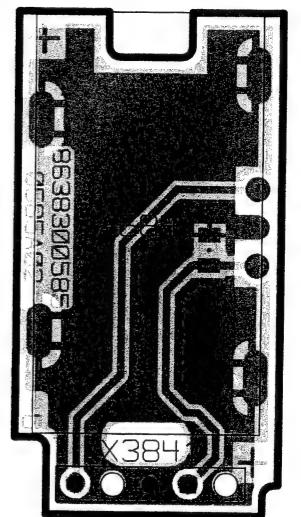
PL 0849 A01

Chip



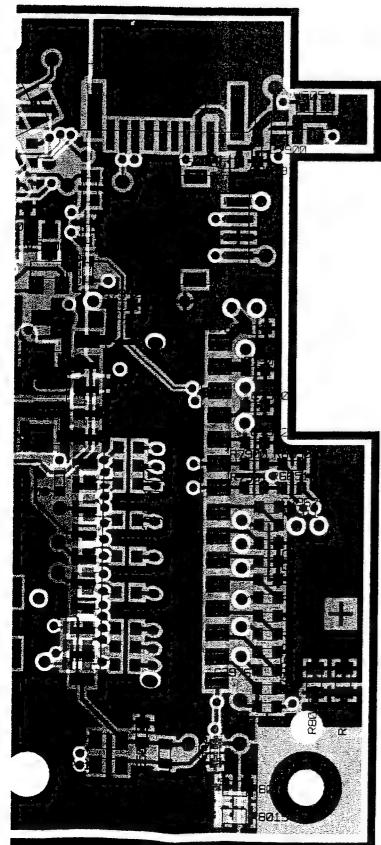
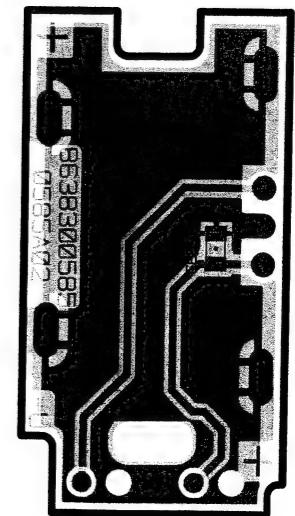
TravelPilot RNS 150  
TravelPilot RNS 3

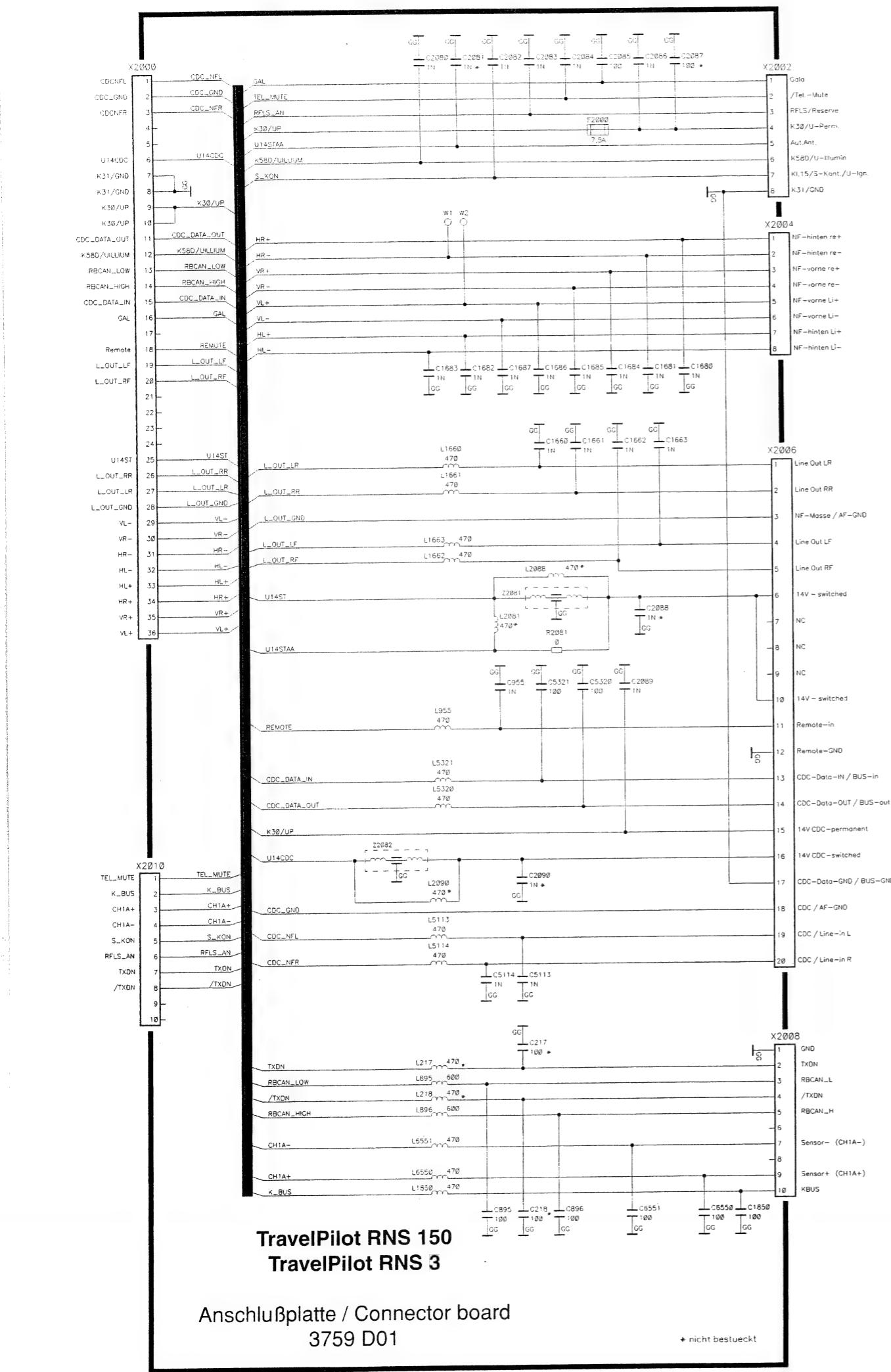
Gyro-Platte / Gyro board  
0585 A02



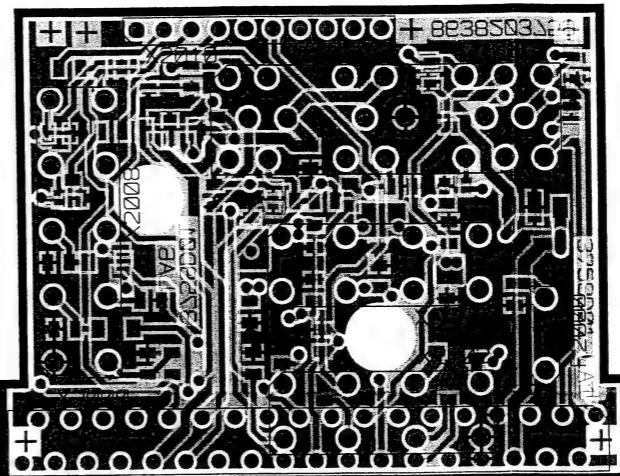
Gyro-Platte  
Gyro board  
PL 0585 A02

Gyro-Platte  
Gyro board  
PL 0585 A02  
Chip

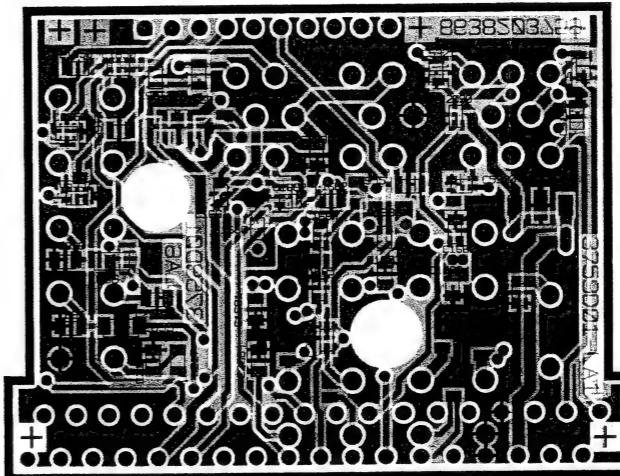




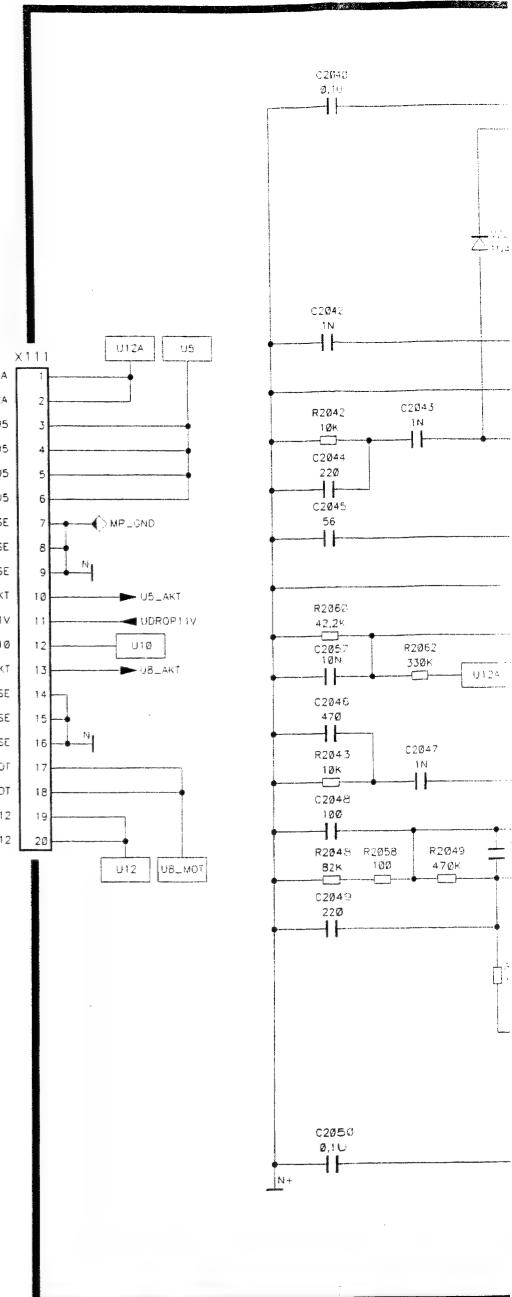
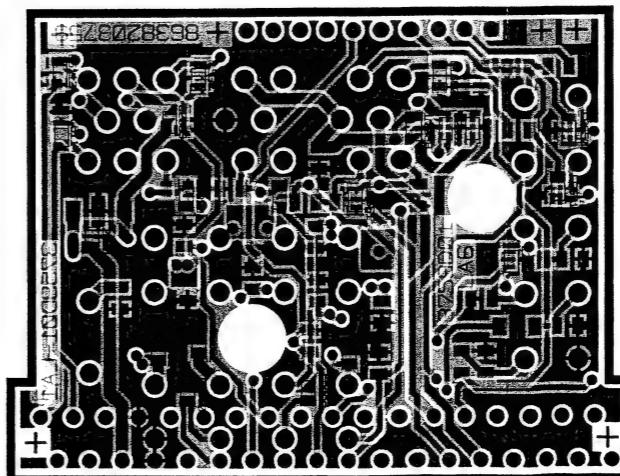
**Anschlussplatte  
Connector board  
PL 3759 D01**



**Anschlussplatte  
Connector board  
PL 3759 D01  
Chip**

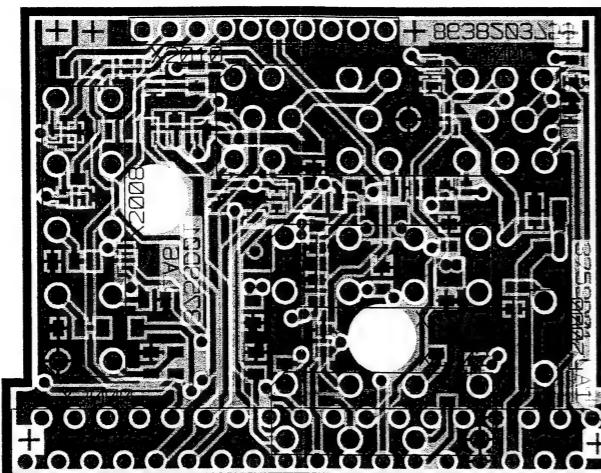


**Anschlussplatte  
Connector board  
PL 3759 D01  
Chip**

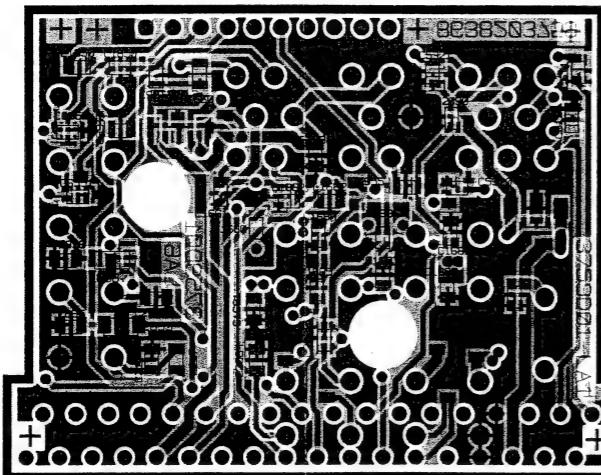


**Netzteil  
Power board  
PL 0277 A13  
Chip**

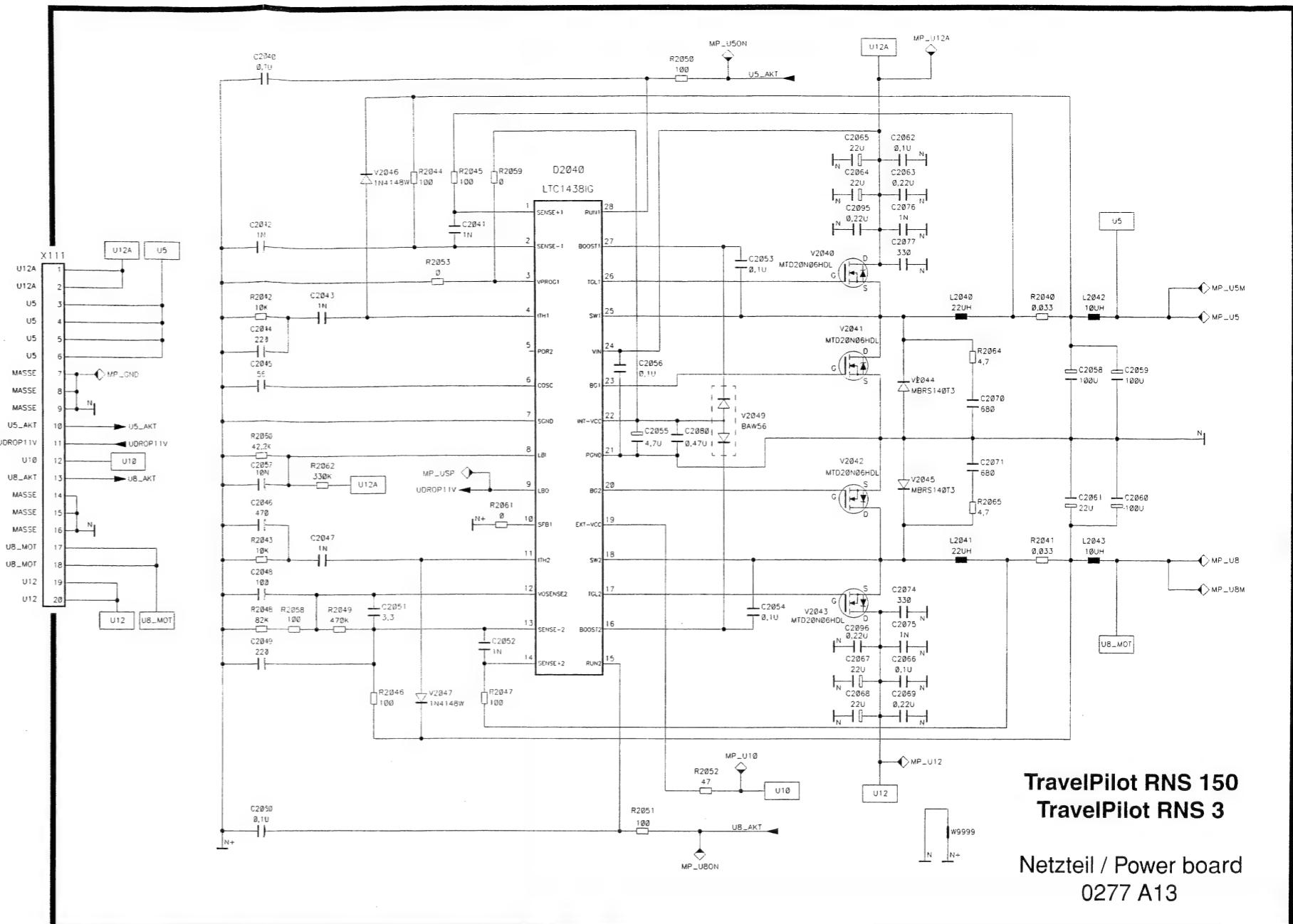
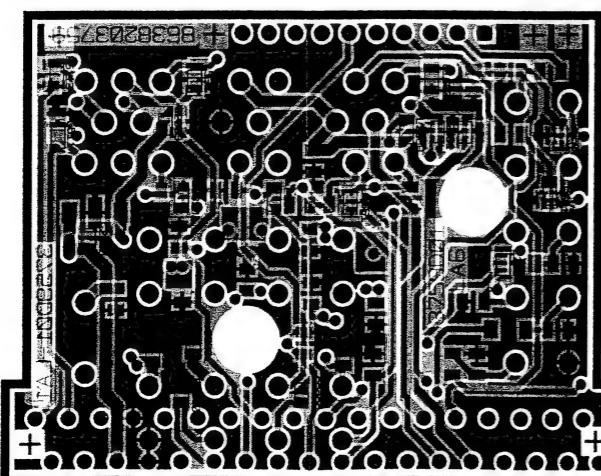
Anschlussplatte  
Connector board  
PL 3759 D01



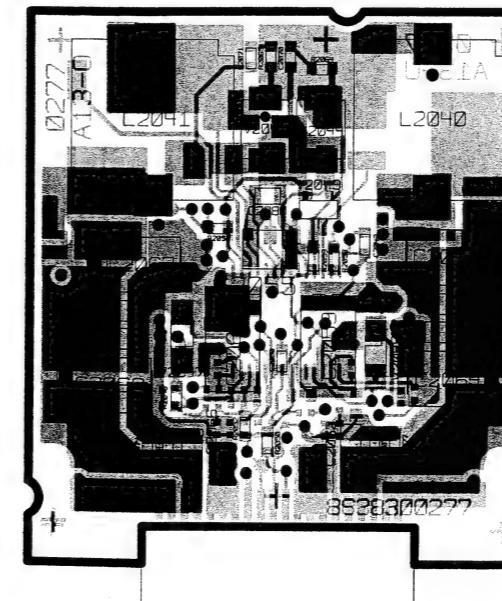
Anschlussplatte  
Connector board  
PL 3759 D01  
Chip



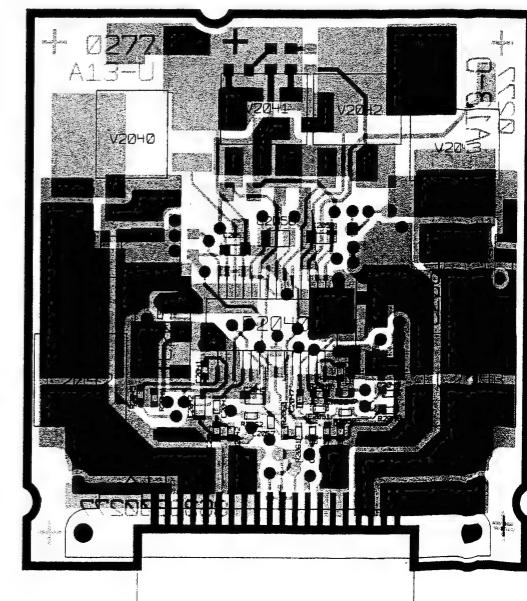
Anschlussplatte  
Connector board  
PL 3759 D01  
Chip

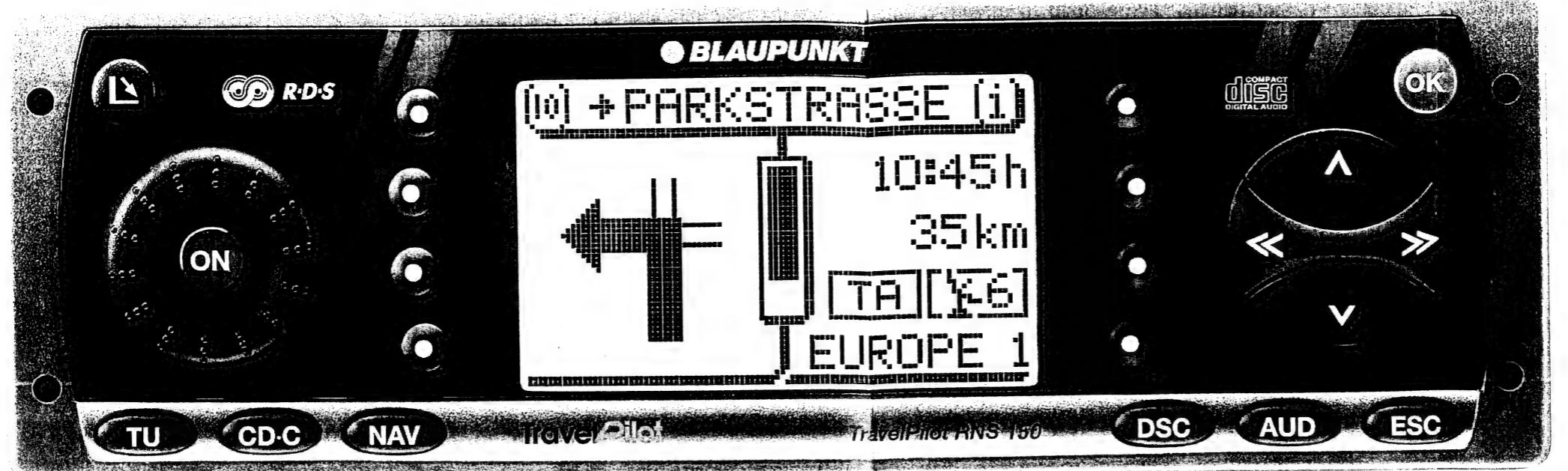


Netzteil  
Power board  
PL 0277 A13  
Chip

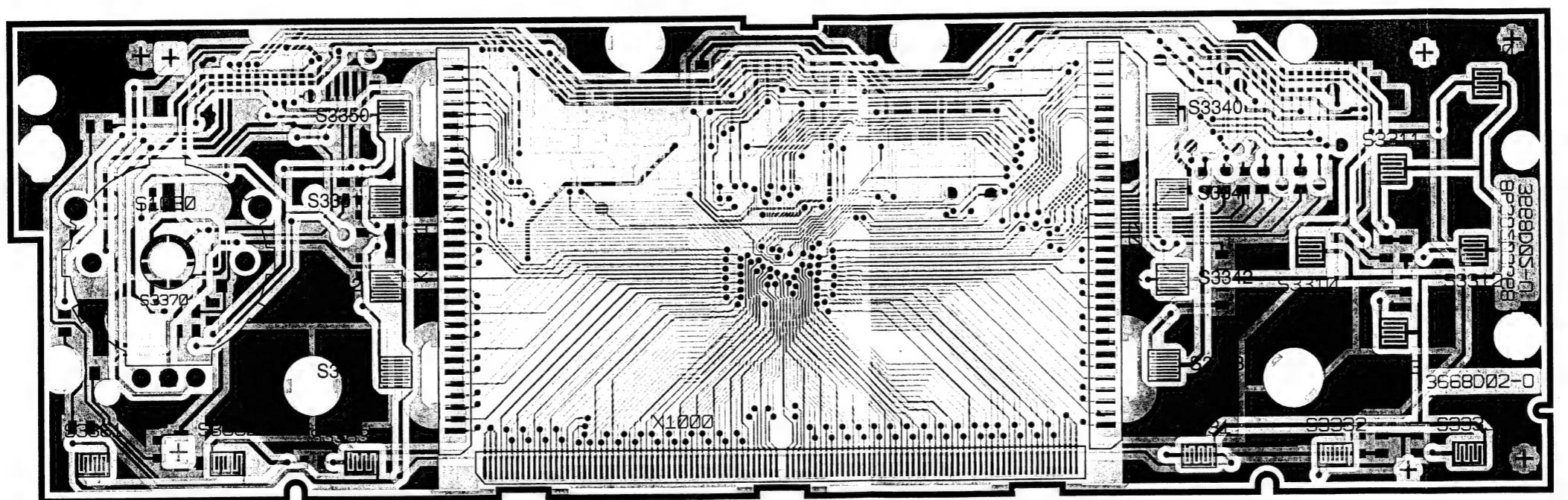


Netzteil  
Power board  
PL 0277 A13  
Chip

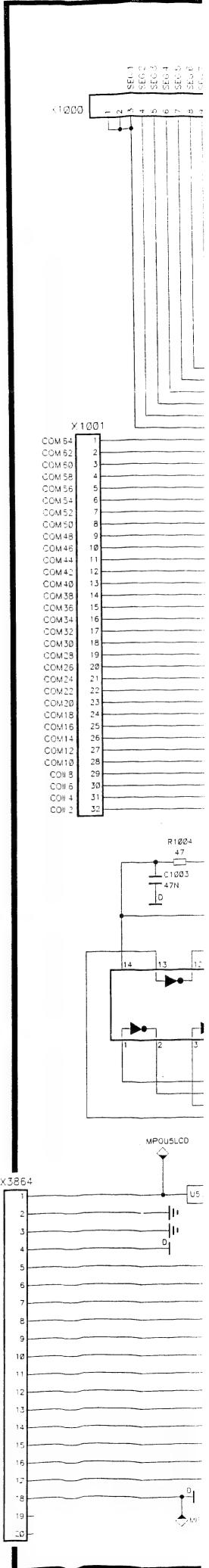
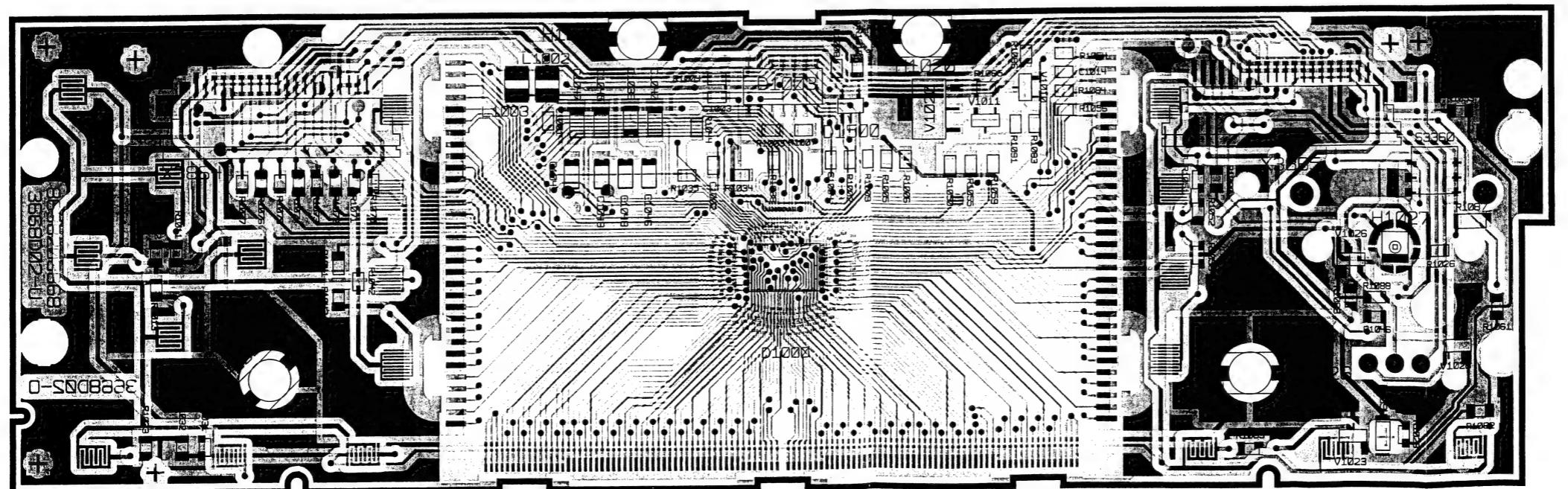


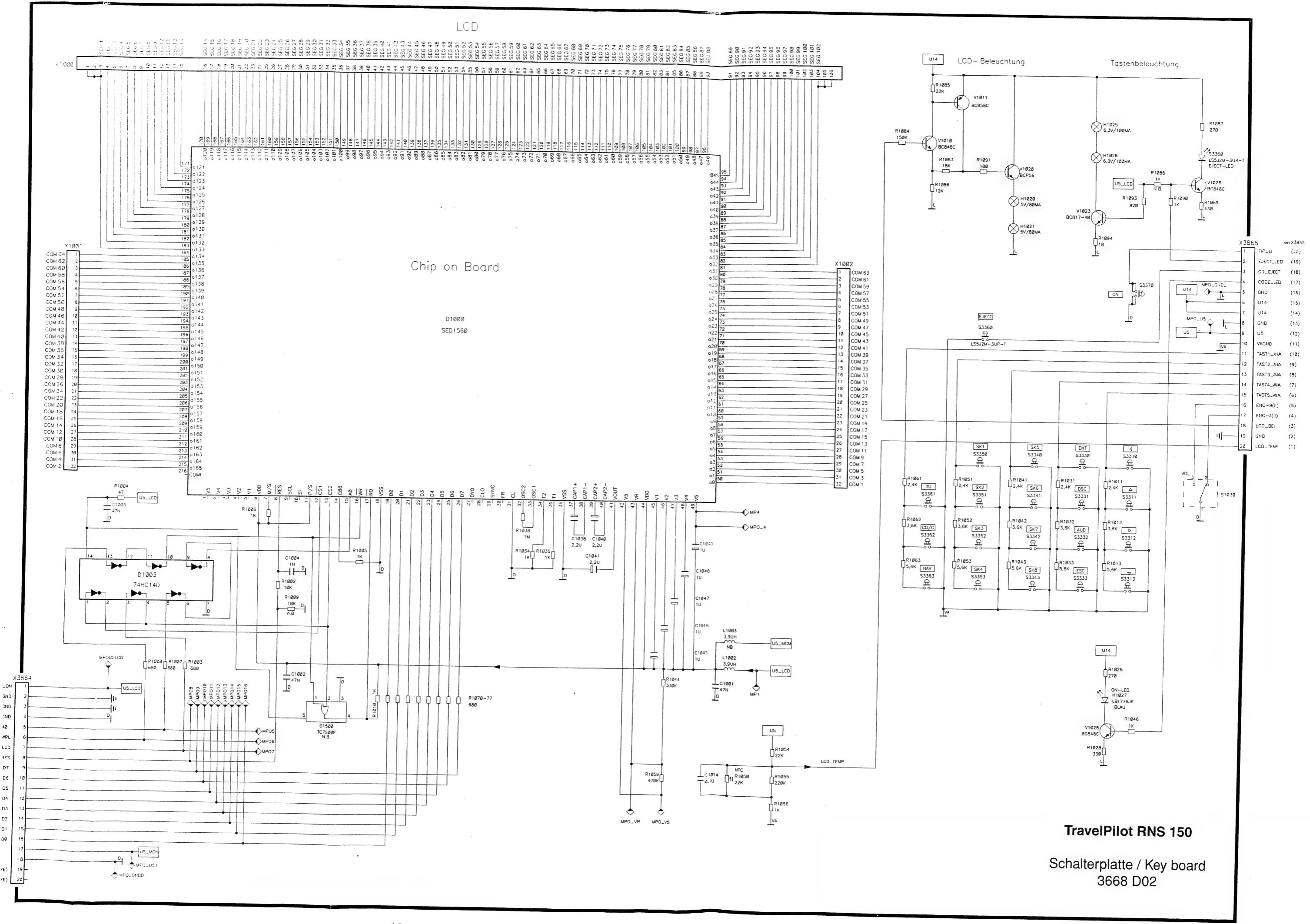


Schalterplatte  
Key board  
PL 3668 D02  
B + Chip



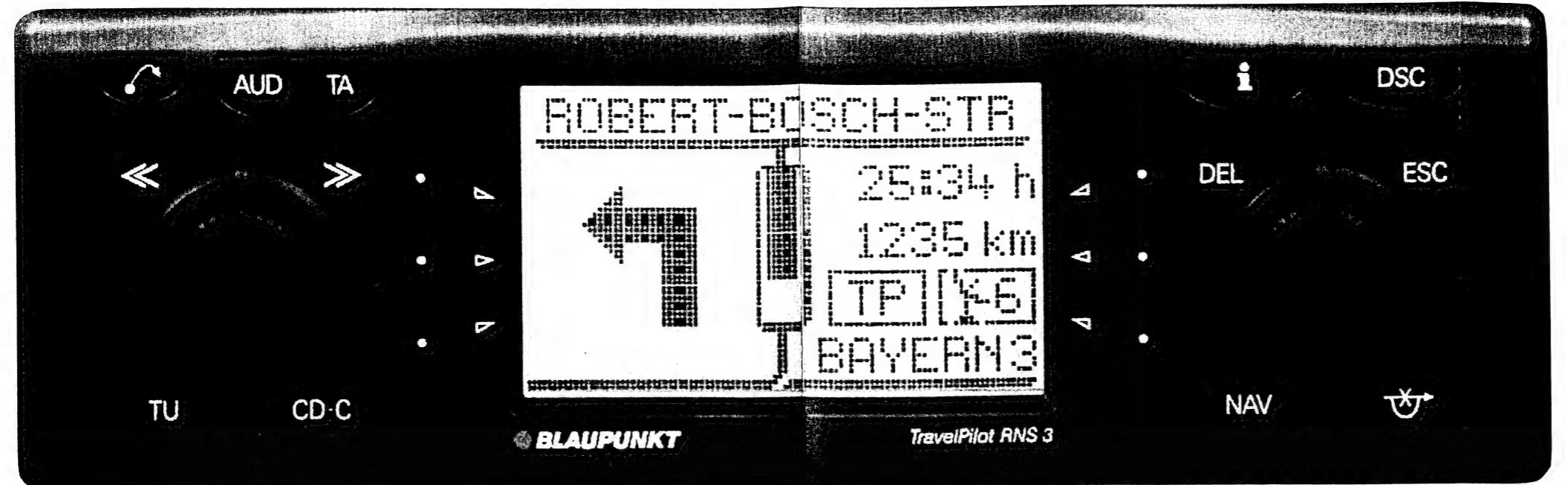
Schalterplatte  
Key board  
PL 3668 D02  
Chip



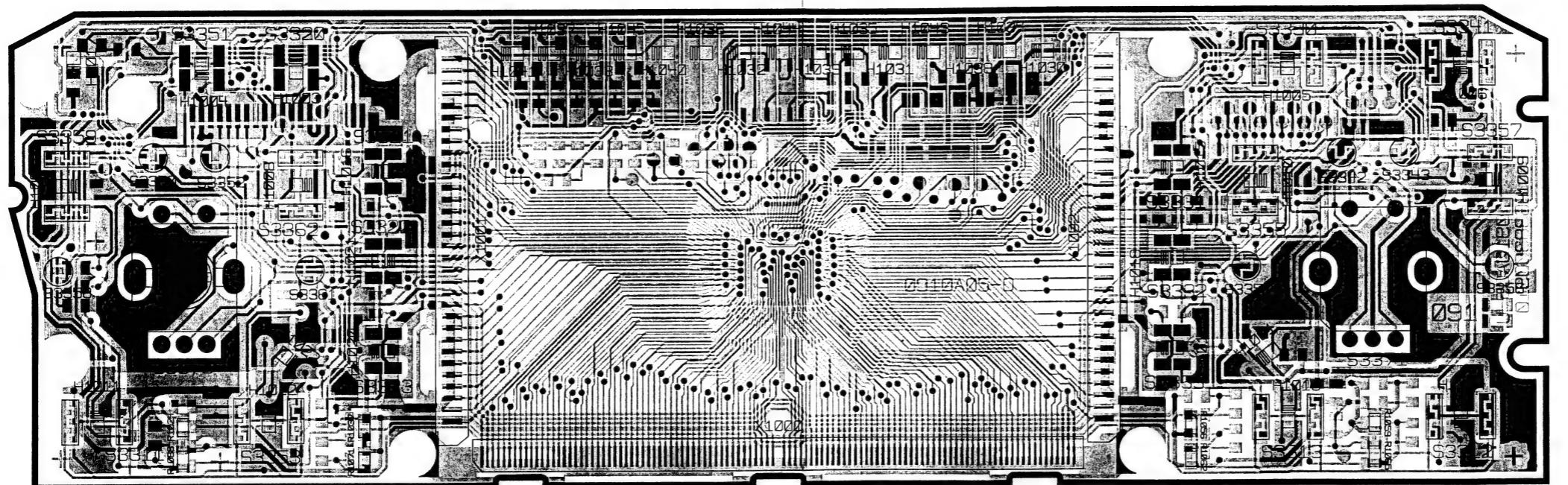


## TravelPilot RNS 150

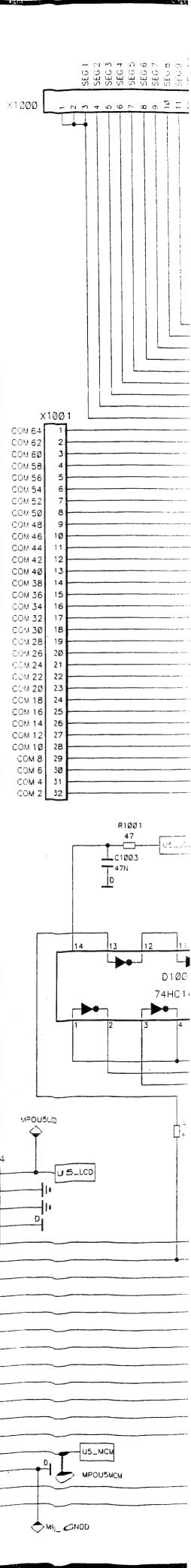
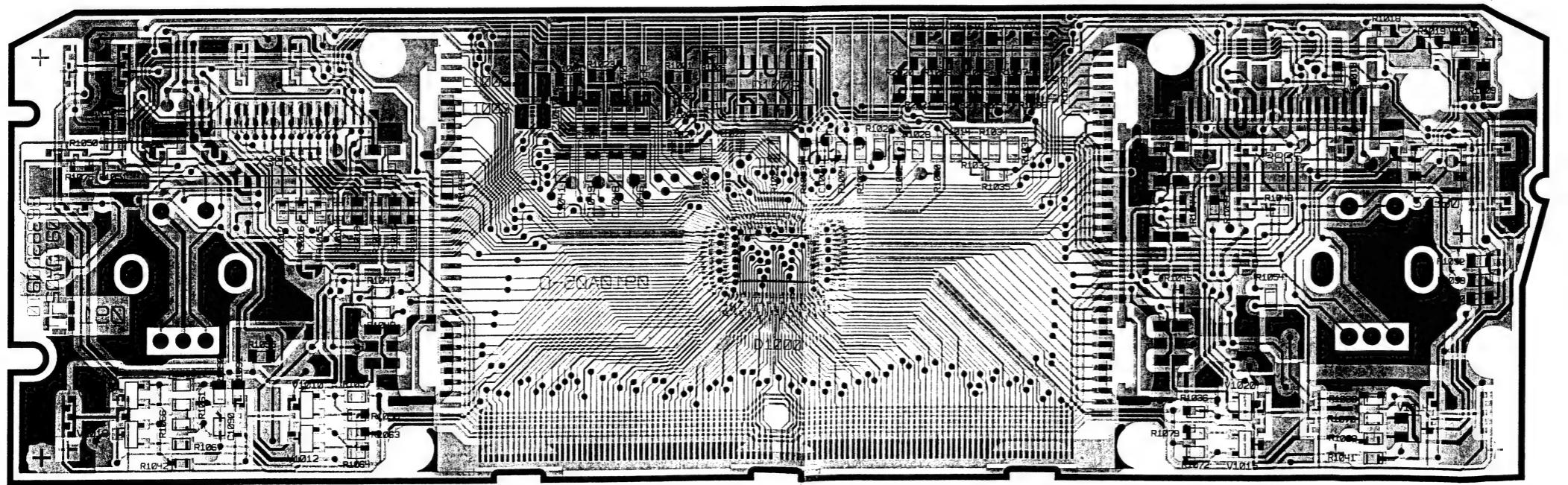
Schalterplatte / Key board  
3668 D02



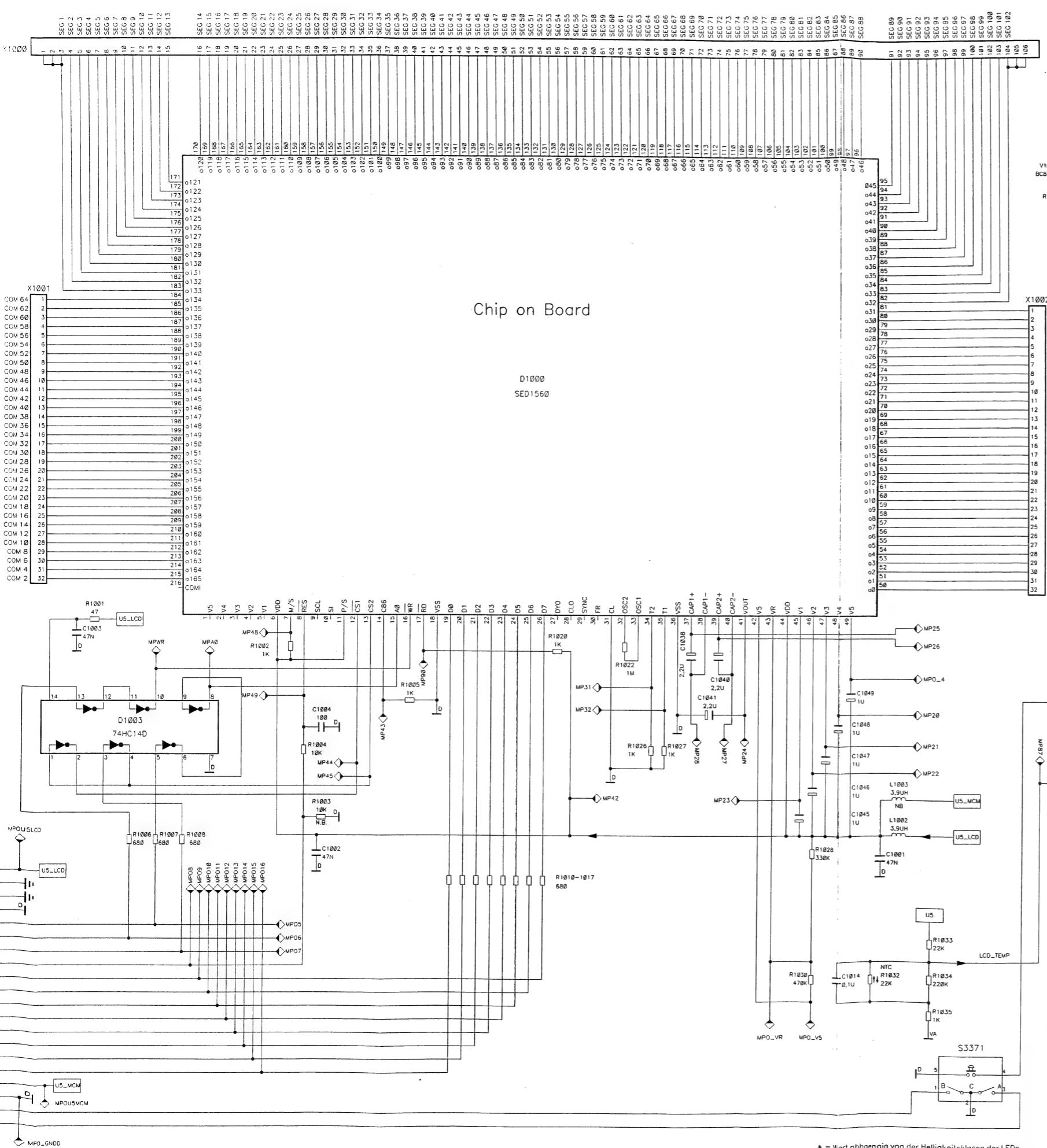
**Schalterplatte  
Key board  
PL 0910 A05  
B + Chip**



**Schalterplatte  
Key board  
PL 0910 A05  
Chip**



### LCD





# Navigation TravelPilot RNS 150

## (D) Service Konzept 7 612 001 172/173

<b>Allgemeines:</b>	Nachfolger des TravelPilot RNS 149 mit geänderter Software und 4-fach Preamp-Out. Den TravelPilot RNS 150 gibt es in 2 Ausführungen: 7 612 001 172 Silber und 7 612 001 173 Schwarz
<b>Produktbeschreibung:</b>	Navigation im 1 DIN-Einblockgehäuse mit Skyline-Kappe ohne KeyCard mit Voll-DOT-Matrix-Display und MCM, Radio 2 IC-Konzept, BP1-LW mit Navi-Modul C und BP-GPS-Empfänger. Einstellbarer Gyro.
<b>Optimales Zubehör:</b>	CD-Wechsler CDC A 08, IDC A 09, Lenkradfernbedienung RC 06
<b>Anlauftermin D:</b>	Mai 2000
<b>Vertriebsweg:</b>	D, F, I, CH, B, NL, E, P, DK, S, GB
<b>Service-Abwicklung</b>	Es gilt das Servicekonzept vom TravelPilot RNS 149.
<b>Dokumentation:</b>	Bedienungsanleitung 8 622 402 230 D, F, I Bedienungsanleitung 8 622 402 251 E, P, GB Bedienungsanleitung 8 622 402 252 S, DK, GB Bedienungsanleitung 8 622 402 229 NL, F, D Ersatzteilliste 8 622 402 399

**Rückfragen:** RG-KD-Leiter

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Ihr Ansprechpartner: K7/VKD2 R. Knackstedt, Tel.: (0 51 21) 49-41 33

Für Ihren internen Verteiler:

X Organisation  
X Verkauf

X Werkstatt  
X Einbau

X Ersatzteildienst  
DAB

X Navigation  
Mobile Audio/Video

Autoradio  
RadioPhone

Verteiler-Nummer: 116, 101

**(GB) Service Concept 7 612 001 172/173**

**General:** Successor to the TravelPilot RNS 149 with altered software and 4 preamp-outs.

The TravelPilot RNS 150 is available in two versions:  
7 612 001 172 silver and 7 612 001 173 black

**Product description:** Navigation unit in 1 DIN single-unit casing with Skyline cover, without keycard, with full dot matrix display and MCM, radio 2IC concept, BP1-LW with navigation module C and BP GPS receiver.  
Adjustable gyro.

**Optional accessories:** CD changer CDC A 08, IDC A 09, steering wheel remote control RC 06

**Launch date D:** May 2000

**Distribution channels:** D, F, I, CH, B, NL, E, P, DK, S, GB

**Service handling:** The service concept for the TravelPilot RNS 149 applies.

**Documentation:**

Operating instructions	8 622 402 230	D, F, I
Operating instructions	8 622 402 251	E, P, GB
Operating instructions	8 622 402 252	S, DK, GB
Operating instructions	8 622 402 229	NL, F, D
Replacement parts list	8 622 402 399	

**Queries:** RG-KD manager

(1) **Concetto per il servizio di assistenza tecnica 7 612 001 172/173**

**Note generali:** Successore del TravelPilot RNS 149 con software particolare e con 4 Preamp-Out.

Il TravelPilot RNS 150 viene fornito in 2 esecuzioni:  
7 612 001 172 argento e 7 612 001 173 oro.

**Descrizione di prodotto:** Sistema di navigazione in 1 scatola DIN monoblocco con calotta skyline, senza KC (KeyCard), con display a complete matrici DOT e MCM, radio concetto 2IC, BP1-LW con modulo di navigazione C e ricevitore BP-GPS. Giroscopio regolabile.

**Accessori optional:** Multilettore CD CDC A 08, IDC A 09, telecomando da volante RC 06

**Immissione sul mercato D:** Maggio 2000

**Vie distributive:** D, F, I, CH, B, NL, E, P, DK, S, GB

**Svolgimento del servizio di assistenza tecnica:** Vale il concetto di servizio di assistenza tecnica concepito per il TravelPilot 149.

<b>Documentazione:</b>	Istruzioni d'uso	8 622 402 230	D, F, I
	Istruzioni d'uso	8 622 402 251	E, P, GB
	Istruzioni d'uso	8 622 402 252	S, DK, GB
	Istruzioni d'uso	8 622 402 229	NL, F, D
	Elenco pezzi di ricambio	8 622 402 399	

**Per chiarimenti:** Direttore RG-KD

F

## Concept de service après-vente 7 612 001 172/173

**Généralités:** Successeur du TravelPilot RNS 149 offrant un logiciel spécifique et 4 x sortie préampli.

Le TravelPilot 150 est disponible en deux versions:  
7 612 001 172 argenté et 7 612 001 173 noir.

**Description du produit:** Navigation en un boîtier mono-bloc de format DIN 1 avec cache Skyline sans KeyCard, écran entièrement matriciel et MCM, concept 2IC radio, BPI-LW avec module de navigation C et récepteur GPS BP. Gyroscope réglable.

**Options:** Changeur CD CDC A 08, IDC A 09, télécommande au volant RC 06

**Date de lancement en Allemagne:** Mai 2000

**Vente:** D, F, I, CH, B, NL, E, P, DK, S, GB

**Déroulement du service après-vente:** Concept de service après-vente du TravelPilot RNS 149

<b>Documentation:</b>	Manuel d'emploi	8 622 402 230	D, F, I
	Manuel d'emploi	8 622 402 251	E, P, GB
	Manuel d'emploi	8 622 402 252	S, DK, GB
	Manuel d'emploi	8 622 402 229	NL, F, D
	Liste de pièces détachées	8 622 402 399	

**Pour tout renseignement,** contactez le directeur KD RG.